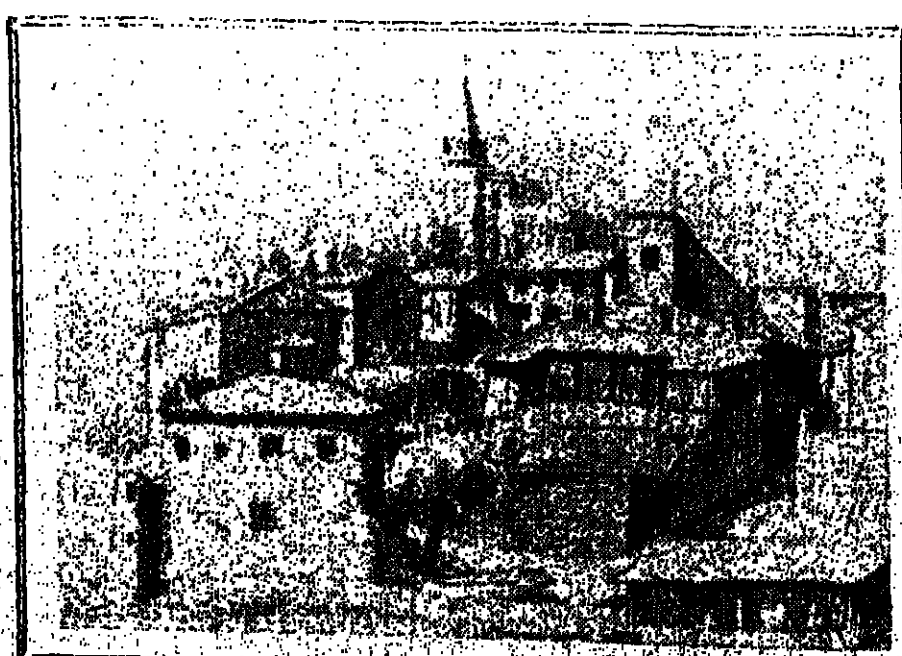


I. DANCIU

On this page: The Portrait of Avram Iancu, Portrait of a Woman, The Portrait of Adam Ballint (top), The Portrait of Simcon Ballint (fragment), Old Street in Craiova (left), Figures of Serbian Revolutionaries (right), The Portrait of Petru Dobra, Lyon - the Barbe Island (bottom).



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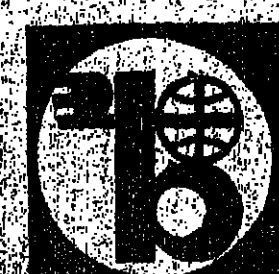
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NEWS, NOTES,
INFORMATION
(PAGES 1, AND 2)

**TRADE-
COOPERATION-
DEVELOPMENT
PEACE**
(PAGES 5-6-7)



AN EXPRESSION OF THE ECONOMIC POLICY AND TECHNOLOGICAL LEVEL RAILWAY TRANSPORT IN THE 1980s

NEW PRODUCTS, TRADITIONAL TRADE PARTNERS

As part and parcel of the general policy of consistent promotion of its international economic ties, Romania pays special attention to expanding its commercial relationships with the socialist countries. Thus, presently, the exchange of goods with these states account for some 33 per cent of the overall volume of Romania's foreign trade.

In this context, the Romanian-Czechoslovak economic ties hold a front-ranking place, undergoing a dynamic evolution and permanent diversification. Besides a quantitative growth in exchanges, stress should be laid on the modernization of their structure, in which of machine tools delivery accounts for 66 per cent during this five-year plan period as against 55 per cent registered throughout the 1961-1965 period.

These achievements have recently been highlighted on the occasion of Romania's participation in the 30th edition of the International Technical Fair of Brno, specialized in machine engineering, this 1968 edition of that event dealt in particular with machine tools for metal and wood processing, textile machines, transport means, construction equipment, farming machines, installations for the metallurgical and chemical industry, mining and oil equipment, industrial automation systems, electronic and electro-technical devices.

Accordingly, 13 foreign trade enterprises which represented Romania at Brno displayed a varied line of technical products throughout 1,300 sq. m. These products made up a synthetic image of the latest achievements of the Romanian economy and of the main fields of activity involving the Romanian-Czechoslovak relations, as well as a concrete analysis of the possibilities of developing these ties.

For example we shall mention that in the field of machine tools in which Romania ranks fourth in the world hierarchy — Uzineexportimport presented specialists with a series of installations characterized by high accuracy in processing, versatility and robustness, such as lathes, grinding machines, the flagging hydraulic press PPT-23, knifing machines and others.

An excellent impression was made by the wood processing equipment displayed by Vitoclim-Forexim, special interest being shown in the MFL wood rolling machine, the FCX-220 duplicating milling machine, and the SIAPP-100 saw sharpening machine.

Eulogies were reaped by the motor cars and vehicles offered by Auto-Dacia and Universal-Autotractor, which have imposed themselves with their modern design, comfort ensured to passengers and a staff, reduced fuel consumption and a solid construction. We are referring to the Oilett 11 R and its full-service variant, to Dacia 1410 Station Wagon and the AIO 10.4 all-terrain car, as well as the DAC 26280 DFS autotractor and the TV utility van.

Also from the field of machine and instrumental engineering the Romanian exhibition included also the SM 802 excavator, the MCS 28 semi-trail motor-compressor, exported by Mec-

noexportimport, equipment for the food industry and hydraulic cylinders picked up from the production list of the Industrial-Exportimport enterprise, as well as bearings delivered to scores of countries by Tehnoimport-export.

The pavilion designed for electronic and electrotechnic devices housed other Romanian exhibits, well-known and appreciated in Czechoslovakia, such as Electronum and Electroexportimport, whose extremely reliable and high-tech products around the interest of both specialists and callers. We refer to the independent 1-100 computer, to the 3030 graphic display and to the alpha numerical-graphic-holographic display, to electronic components and telephone exchanges, to electronic measuring and control instruments, the rectifier by a high class of accuracy, to opto-micro-electronic apparatuses and to lighting fixtures and household electro-technical appliances (fridges,

radiators, etc), cables and car electric accessories.

This brief and selective presentation of Romanian exhibits and exhibits at Brno '68, in which we may add the foreign trade firms of Contranimest, Romenergo, Romelectro and Metalexportimport allows us to outline the main features of a participation which despite a sharp competition, has been imposed on all planes, the commercial one included. In this respect we have to underline that Romania's presence at the 1968 edition of the Brno International Technical Fair created premises for spurring bilateral economic ties through the signing of important import and export contracts by the enterprises of Mecanexportimport, Romenergo, Uzineexportimport, Magneexportimport, Electrom, Electroexportimport, Universat-Autotractor, Auto-Dacia, Metal-exportimport, Vitoclim-Forexim, Contranimest, Tehnoimport-export, Iecocimp-lexim and Mercur.



The Institute of Metallurgical Research in Bucharest

NEW PROSPECTS FOR ROMANIAN-IRANIAN COLLABORATION

The 14th edition of the Tehran International Fair, which was attended by 38 countries including Romania which again asserted herself as a traditional participant, unfolded under the motto "The Reconstruction of the Iranian Economy after the Cessation of the War between Iran and Iraq", the primary domains of this process being petrochemistry, energy, the repair and maintenance of port facilities.

As a matter of fact, these are the economic sectors in which a steady cooperative activity is already taking place between Romania and Iran. Concrete examples in this respect are the works for the improvement and expansion of Bandar-Khomeini port, the setting up of overhead electric lines and the manufacture of refinery equipment jointly with the Machine Skazi Arak firm. But with these pro-

jects we have not exhausted the list of "credentials" of Romanian-Iranian collaboration, which also comprises the tractor assembly line at Tabriz, which has a capacity of 10,000 units annually, the soda ash factory at Shiraz, whose initial capacity of 60,000 tons is to be increased, the building of agro-industrial and food complexes such as the one at Rosh, cereal silos, refrigerating warehouses, wheat mills, the woodworking plant at Neka-Chaub etc. Moreover, the Romanian specialists granted technical assistance for the works on the Vafraeghan dam.

Along the same mutually advantageous line one should mention the delivery of Romanian goods to the Iranian market which include tractors and spare parts, electronic equipment, electrical machinery, food, motors, electronic items, elec-

RECEPTION BY THE PRESIDENT OF THE REPUBLIC THE DELEGATION OF THE FRENCH NATIONAL EMPLOYERS' COUNCIL

On Thursday, October 13, President Nicolae Ceausescu of Romania received the delegation of the French National Employers' Council, led by Raymond Ravenot, Chairman of the France-Romania Committee of the Council, General Manager of "Citroen Automobile".

During the interview aspects were approached of the cooperation between Romanian and French enterprises in various domains, in the context of the relations between the two countries as a whole. The importance was stressed of further expanding economic, technical, scientific, industrial cooperation between Romania and France. Emphasis was also placed on re-launching cooperation ventures, initiating and carrying through of Romanian-French cooperation projects on third mar-

kets. In that context the meeting was underscored of setting up working groups that discuss and agree upon objectives and modalities in the main domains of the Romanian-French cooperation.

President Nicolae Ceausescu showed that Romania wished to develop trade and cooperation with France on mutually advantageous economic terms which should ensure maximum efficiency and a high technical level. The Romanian head of state expressed his belief that the delegation's visit to Romania would contribute to identifying new ways and possibilities aimed at easing the further growth of the economic links between Romanian and French firms in general.

UZINEEXPORTIMPORT A PRESTIGIOUS FIRM

Specializing in the export of complex industrial installations and boasting an over 25-year long experience in this field, Uzineexportimport ranks among the most representative Romanian foreign trade enterprises.

Uzineexportimport's range of activities includes the marketing of complex installations for the metallurgical industry, the cement industry and shipbuilding, as well as of a wide array of plants manufacturing production means.

Uzineexportimport also offers foreign partners full services including turn-key deliveries, technological equipment, technical documentation, engineering, know-how, technical assistance on project mounting

and setting into operation, personnel training and other services implied by the complexity of a complex industrial unit.

A conclusive proof of the firm's possibilities in the field of industrial facilities for industry is the fact that in the course of two decades (1950-1970) Uzineexportimport delivered over 40 percent of the total value of the foreign trade turnover of Romania with capital worth between 800 and 1,200 million dollars a day, on a par with the highest international standards of their being equal with precision installations which secure the full exploitation of the raw material, the higher quality of the products obtained and a considerable reduction of specific consumption of materials, fuel and energy as well as of the expenses required by the project.

In numerous countries including the USSR, Cuba, Yugoslavia, Somalia, Pakistan, Iraq, Egypt, the cement facilities delivered by Uzineexportimport are currently working successfully by the end of 1970, cement factories will be started operating in Iraq, People's China, etc.

Another field in which Uzineexportimport has obtained remarkable success over the last few years, winning appreciation abroad, is the delivery of complex industrial equipment and installations in the metallurgical industry. The most important complex exported so far was a steel rolling iron-ore agglomeration plant, equipped with Siemens furnaces, electric arc furnaces or LD converters, which are used for the production of steel from iron scrap, pig iron, iron sheet, and pig iron.

Uzineexportimport has also delivered a wide range of industrial machinery, including rolling mills, wire drawing machines, metalworking machines, etc. The firm's products are used in a wide range of industries, from metallurgy to food processing.

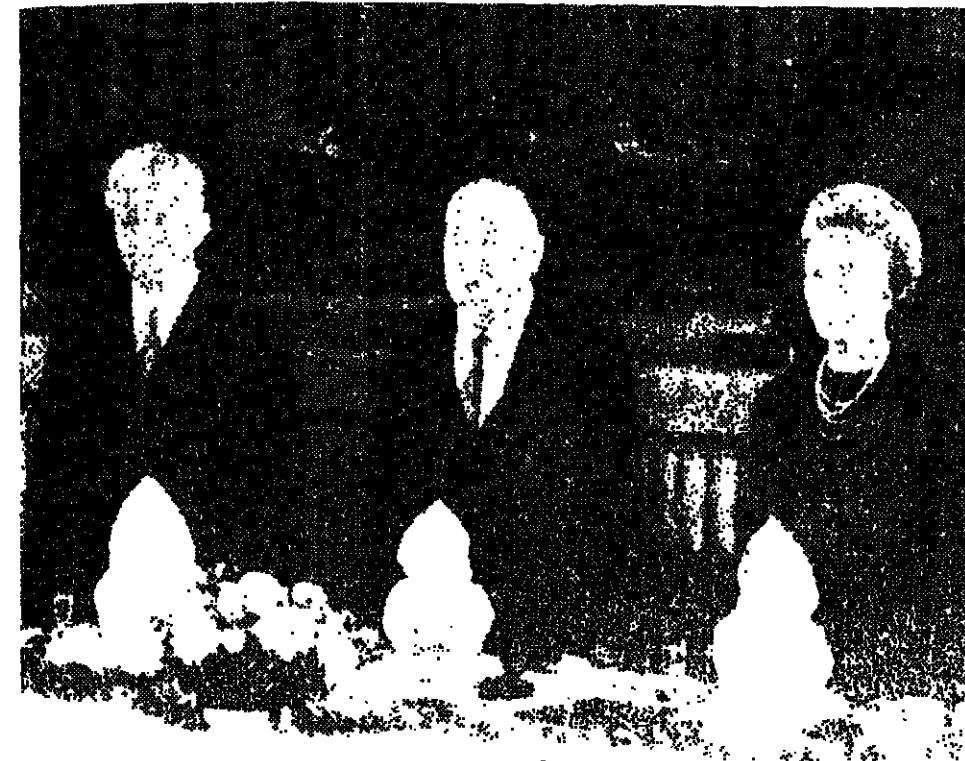
Uzineexportimport is also active in the field of shipbuilding, having delivered several large ships to various countries, including the USSR.

The firm's success is due to its high technical standards, its experienced staff, and its long-standing relationships with its partners.

Uzineexportimport is a member of the International Chamber of Commerce and the International Union of Pure and Applied Chemistry. The firm's products are sold in over 100 countries.

These facts make an important contribution to strengthening Romanian-Iranian collaboration.

NICOLAE CEAUSESCU AND ELENA CEAUSESCU PAID AN OFFICIAL FRIENDLY VISIT TO THE PR OF CHINA



(cont. from p. 1)

and the state of socialist construction in the two countries, made an in-depth analysis of the Romanian-Chinese relations and of their development prospects, and worked out a productive exchange of opinions on major questions of the international life and of the international communist and worker movement.

The leaders of Romania and China were highly satisfied at the growth and strengthening of the traditional relations of friendship, cooperation and solidarity between the Romanian Communist Party and the Chinese Communist Party, between the Socialist Republic of Romania and the People's Republic of China, and the People's Republic of China, between the Romanian and Chinese peoples which they assessed to fully meet the interests of socialist construction



in the two countries and of the cause of world peace. The determination was stated to further base those relations on respect for the principles of national sovereignty and independence, equality of rights, non-interference in domestic affairs, mutual advantage and comradeship.

A positive appreciation was made of the results of late in the expansion and diversification of economic, technical, scientific cooperation, and in the growth of trade.

Furthermore, the two parties and states were shown to be resolved to take action and set the steady development of mutually economic links on a stable and long-term basis. The profound belief was expressed that through the joint fight at peoples' level the progress for a global solution to underdevelopment problems, the bridging of gaps between rich and poor countries, and for the establish-

ment of a new international economic order based on full equality and equity in international relations, and stated that they were ready to take further action for the attainment of like goals.

During the talks the party and state leaders of the two countries paid special attention to the outstanding issues in Europe, Asia, Africa and Central America. Questions were approached related to disarmament and the building-up of confidence, security and cooperation in Europe. Emphasis was placed on the need for a peaceful, just and durable settlement of the situation in the Middle East, the withdrawal of Israeli troops from the occupied territories, and the resumption of negotiations for a comprehensive peace in the region.

The party and state leaders of the two countries underscored that everything necessary should be done by all the states of the world, by the USSR and the USA primarily, so that new understandings be reached and definite liquidation of nuclear weapons, to the cessation of nuclear tests and of space militarization.

Romania and China are for the elimination of chemical and

other weapons of mass destruction, for a substantial cut in conventional arms and military spending.

Hope was expressed that the Soviet-American negotiations would lead to understandings on the resolution of the arms race and the substantial reduction of weapons, nuclear in the first place, which would meet the world peoples' legitimate demands, the interests of international peace and détente.

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Romania and China speak up for a leading role of the UN in the settlement of the major problems of the present-day world in the interest of peoples of the two countries expressed their satisfaction at the close cooperation between Romania and China on an international plane and decided that contacts and consultations be intensified in that domain and their cooperation be expanded at the UN and the other international organizations.

The two party leaders are of the opinion that the relations between communist and worker parties should be set on the principles of independence, equal rights, mutual respect and non-interference in domestic affairs. Stress was also laid on the need for the observance of each party's right to self-dependently work out its political line, its revolutionary strategy and tactics, to choose the ways of revolutionary changing society in consensus with the conditions in its own country.

The two party and state leaders expressed their full satisfaction at the talks held in Bucharest, the results of the visit of the General Secretary of the Romanian Communist Party, President of the Socialist Republic of Romania, Nicolae Ceausescu, together with Elena Ceausescu to the People's Republic of China, at the understanding reached, amounting to a new, another telling expression of the Romanian-Chinese friendship and solidarity.

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The hydrodynamic test laboratory of ICEFRONAV, Galati

NICOLAE CEAUSESCU AND ELENA CEAUSESCU PAID AN OFFICIAL FRIENDLY VISIT TO THE DPR OF KOREA

(cont. from p. 1)

Official talks were conducted at Kumsusan palace in Pyongyang by RCP General Secretary, Romanian President Nicolae Ceausescu, by Elena Ceausescu and Kim Il Sung, General Secretary of the CU of the Workers' Party of Korea, President of the Democratic People's Republic of Korea.

During the talks, information was exchanged on the process of socialist construction in the two countries.

Views were also exchanged on the current development stage and prospects of the Romanian-Korean relations in the political, economic, technical, scientific, cultural and other areas of joint interest. It was stressed that the national economies of the two countries that undergo continual growth and modernization, provide possibilities for an increasing volume and diversification of economic exchanges, for the expansion of collaboration and cooperation in production, on mutually advantageous terms. It was also agreed to broaden collaboration in science, education and culture just as in other fields of activity.

Reiterating willingness to further expand and consolidate the close links between Romania and the DPR of Korea on a political plane, the two party and state leaders underscored that that was in the interest of both peoples, of their progress and prosperity, of the cause of socialism and peace.

During the talks several aspects of the current international life and the communist and working-class movement were also approached. It was stressed that on such matters the Romanian Communist Party and the Korean Workers' Party, the Socialist Republic of Romania and the Democratic People's Republic of Korea had common or very close positions and points of view, which is a good basis for a still broader development of collaboration and cooperation in the international arena, for a growing contribution of Romania and the DPR of Korea to the efforts towards peace, disarmament and the building of a climate of security and détente worldwide.

President Nicolae Ceausescu and Kim Il Sung underscored the need to take firm action for the lessening of tension in the international life, for the resumption and consolidation of the policy of détente, collaboration and respect for independence. It was also assessed that the halting of the arms race, the achievement of disarmament under first and foremost, and the assurance of world peace were fundamental problems of our days.

The two party and state leaders pointed to the necessity to settle interstate disputed issues and the states of tension and conflict by political means,



through negotiations exclusively.

President Kim Il Sung reiterated his country's determination to take unwavering action toward reunification of the fatherland, and warmly thanked for the peaceful and independent reunification of the fatherland, without any outside interference.

President Nicolae Ceausescu reassured the active support of the RCP of Socialist Romania to the just fight waged by the Korean people for the reestablishment of national unity, to the constructive proposals of the DPR of Korea, to President Kim Il Sung's initiatives for the lessening of tension in the Korean Peninsula and the creation of conditions for the peaceful and independent reunification of the fatherland, without any outside interference.

Reviewing the results of the visit and of the talks held on the occasion, the two party and state leaders expressed their full satisfaction at the new Romanian-Korean summit at the understanding reached, with emphasis on the fact that they would give a fresh impetus to the collaboration between the RCP and the KWP, between Romania and the DPR of Korea.

Mutual willingness was expressed to take further action for the consolidation of Romanian-Korean friendship, collaboration and solidarity, for the promotion of collaboration between the two countries on

multiple planes.

Nicolae Ceausescu and Kim Il Sung reiterated the determination of Romania and the DPR of Korea to consolidate their cooperation in the international arena, and to make a growing contribution to a constructive settlement of the complex problems of our time, in the interests of all peoples. The talks passed in the atmosphere of warm friendship, mutual esteem and understanding characteristic of the traditional ties between the two parties, countries and peoples, between the two party and state leaders.

In his speech made at the reception given for him in Pyongyang on October 18, President Nicolae Ceausescu expressed his joy at meeting his old friend and close comrade, Kim Il Sung.

Our visit to the DPR of Korea is an expression of the close relations of friendship, solidarity and collaboration established between our parties and countries as early as the hard years of the Korean people's fight against imperialist aggression, in defence of its homeland's independence and freedom, an illustration of the mutual wish to strengthen still more these friendly relations, to the benefit of both countries and peoples, said the Romanian head of state, recalling that it is four decades these days since the two countries entered into diplomatic relations, with Romania being among the first states to have established such relations with the DPR of Korea.

The speaker stressed that, in the spirit of their steady policy

of international solidarity, the RCP, socialist Romania and the whole Romanian people actively support the just fight of the DPR of Korea for the attainment of the Korean people's legitimate desideratum — the peaceful and independent reunification of the fatherland, free of any outside interference. "We most firmly support your proposals and initiatives, comrade Kim Il Sung, toward lessening the tension in the Korean Peninsula and the beginning of a broad dialogue between the two parts of Korea, that should open the path to the country's unification."

"I am particularly happy that today we meet again, after three years, with dear comrade Nicolae Ceausescu, a close friend and old companion in the revolutionary struggle," said President Kim Il Sung in the address he made on October 18 at the reception given in honour of the Romanian guest, considering that "this proves tellingly how special are the fraternal relations of personal friendship and the comradely brotherly feelings nurtured by us, how lasting and sincere are the friendship and solidarity between our two parties, countries and peoples."

A ceremony took place on October 20 at the Palace of Congresses in Pyongyang within which the title of doctor honoris causa was handed over to Nicolae Ceausescu, General Secretary of the RCP, President of Romania, and to Elena Ceausescu, member of the Executive Political Committee of the CO of the RCP, First Deputy Prime Minister of Romania.

Chairman of the National Council of Science and Education.

President Nicolae Ceausescu was awarded the title of doctor of economic sciences honoris causa, for outstanding merit in party and state activity, in the field of Romania's socio-economic development and solidarity with the DPR of Korea. The doctor of chemical sciences honoris causa was conferred on Elena Ceausescu for her past merits in the development of science and technology, especially in the creation of new branches of Romanian chemical industry, as well as for the contribution made to the strengthening and development of Romanian-Korean friendship and solidarity.

Li Jong Ok, member of the Political Bureau of the Workers' Party of Korea, Vice-President of the DPR of Korea, Chairman of the State Committee on assignment of Scientific titles of the DPR of Korea, made a congratulatory address on the occasion to the distinguished messengers of the Romanian people.

Taking the floor during the ceremony held at the Palace of Congresses in Pyongyang, RCP General Secretary Nicolae Ceausescu, President of Romania, thanked for the title of doctor honoris causa conferred on him and for the title of doctor of chemical sciences honoris causa conferred on Elena Ceausescu. He said that he was very pleased to receive such a high honor from the DPR of Korea, but first of all, it was a token of appreciation of the Romanian people's contribution to the development of Romania's socialist economy, an expression of the close relations between our party and countries, between our scientists and men of letters, and between our people, which he developed and consolidated in all domains of activity. One can say, he added, that Romanian-Korean relations stand as an example of relations between independent sovereign socialist countries which collaborate and cooperate on an equal basis, for the benefit of their peoples, for the progress of their own countries, for the peace and collaboration between peoples and countries.

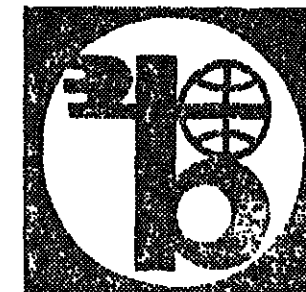
On Wednesday, October 21, during a ceremony at the RCP General Secretary's Office, the DPR of Korea presented the Romanian delegation with a letter of appreciation for their visit to the DPR of Korea, signed by the Workers' Party of Korea, and a letter of appreciation for their visit to the DPR of Korea, signed by the Workers' Party of Korea, and a letter of appreciation for their visit to the DPR of Korea, signed by the Workers' Party of Korea.

During the same ceremony, President Nicolae Ceausescu and Kim Il Sung exchanged views on the current development stage and prospects of the Romanian-Korean relations in the political, economic, technical, scientific, cultural and other areas of joint interest.

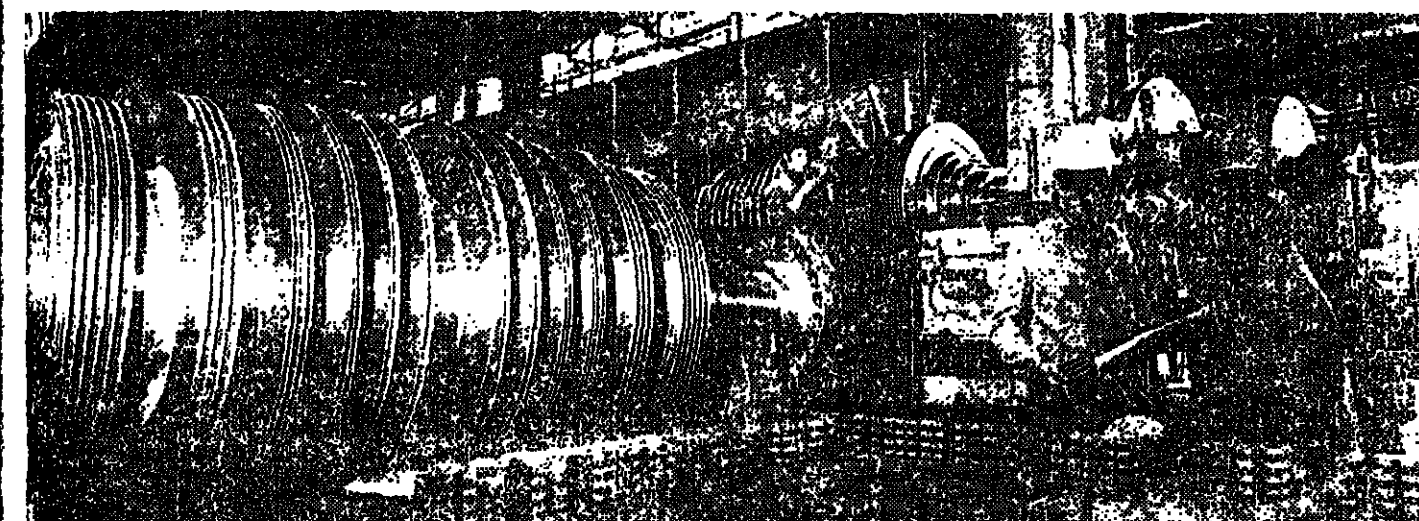
TRADE — COOPERATION — DEVELOPMENT — PEACE

The 14th edition of the Bucharest International Fair — TIB '88 — an event attended by 1,250 manufacturing and exporting firms from Romania and from another 45 countries, is nearing its end. In the previous issues we published a series of declarations made by representatives of foreign companies present at the current display of TIB. This issue carries declarations of other foreign businessmen as well as of representatives of Romanian foreign trade firms whose products have enjoyed a keen interest and which have entered many trade contracts.

JERZY BYJ,
Commercial Attache
to the Polish Embassy in
Bucharest



The cooperation between the industries of Poland and Romania already boasts a long-standing tradition. Thus, it is 10 years since the beginning of Polish-Romanian cooperation in the manufacture of cranes with higher efficiency parameters.



We are now going through another fruitful phase: the joint production of 10 and 15 t cranes, which will add to the 4 t ones.

The commercial exchanges with Romania are conducted by 51 Polish foreign trade central, the largest of which are Kolmar, Bumar, Wegelok, Sial, Export and Koper.

Analysing the economic collaboration carried out so far, one should point out that the achievements in this field are considerable and mutually advantageous, and significant possibilities of deepening and intensifying them still exist.

Export to Romania includes tools, motors, subassemblies and parts for rolling mills, ship equipment, bearings, automation apparatus, measuring and control instruments, electronic items, computer technology, cooking and power generating coal, metallurgical coal, sulfur and consumer goods. In turn, Romania exports to Poland machinery and tools for metal and woodworking, excavators, a wide assortment of bearings, all-terrain cars, electrical and engineering products, aluminium, iron and steel products, various mineral oils, synthetic fibres, sanitary and construction ceramics, and consumer goods.

During the ongoing quinquennial conditions have been created for increasing goods exchanges by up to 27 per cent. Poland ranks third among Romania's 148 trade partners, after the USSR and the GDR.

More than 20 Polish foreign trade central are taking part in this year's TIB with a much richer offer compared to past years, with many technical novelties both for the market and for industry, cooperation, public services and environmental protection.

We firmly believe that this edition of the Bucharest International Fair is a further stage in developing mutually advantageous collaboration and trade.

FROM THE ROMANIAN OFFER

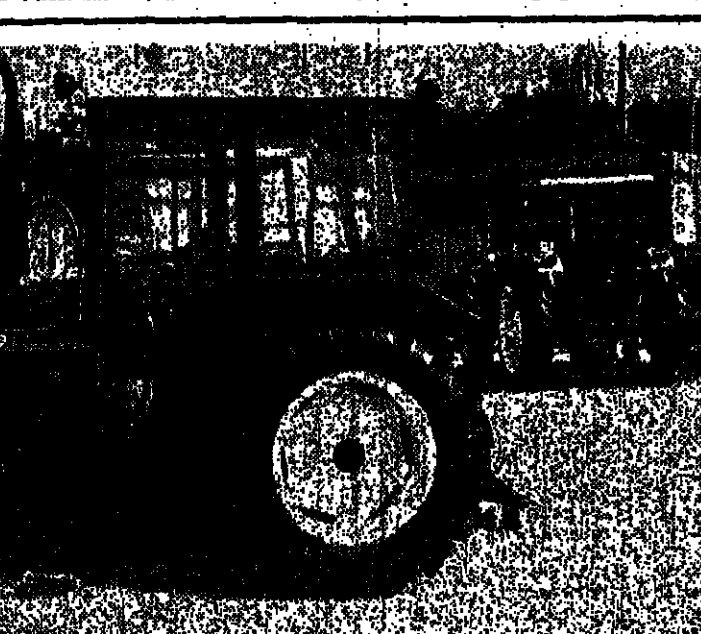
OVIDIU BARBU,
Director
of "Universal Auto Tractor"
Foreign Trade Enterprise

"At Bucharest International Fair, 'Universal Auto Tractor', the foreign trade enterprise of the Industrial Central for tractors, motor vehicles and farm machines-CITMA, Bragov, exhibited more than 300 products manufactured by the 33 enterprises within the mentioned central. These exhibits represent the 1988-1989 export offer of units producing farm and industrial tractors on wheels or caterpillars, farm machines and equipment, motor vehicles for goods and passenger transport or used in construction work, to which are added parts, sub-assemblies, spares for motor vehicles and tractors, in various novelties offered by 'Uni-

versal Auto Tractor". "Universal Auto Tractor" Foreign Trade Enterprise has traditional export relations with hundreds of foreign trade organizations in the USSR, Poland, Bulgaria, Czechoslovakia, Yugoslavia, Cuba as well as with partners of Australia, North, Central and South America, Asia and Africa where we deliver our goods.

TIB '88 is a good opportunity to conclude new contracts, new business relations with firms in the whole world, whose representatives have been in Bucharest these days. In fact, our exhibits at TIB '88 were representative for our production and export list which includes among other things: tractors and tractors (28 types) with capacities up to 35 tons, and engines varying between 135 and 350 hp; tens of types of chassis for superstructures of buses and motor vehicles with special destination; auto trailers with

capacities up to 40 tons, tip lorries up to 35 tons and heavy tip lorries as well as auto cisterns (with capacities up to 20,000 l) for liquid food, gas and chemical product transportation; isothermal and refrigerating pick-up trucks for the transport of perishables; concrete mixers; autoclaves; mobile auto repair shops equipped with service installations, etc. Also, very appreciated were other exhibits like: buses for urban and interurban transport, tourism, including the luxury motorized C.D. (which produces general wraps), Lohavos (supplying fire extinguishers), Davik (manufacturing adhesive tapes), Aconor (selling fruit juice), Microcholine (detergents and marble polishing and cutting), Paskal (manufacturing zippers by injection), Elan (footwear) and Darna (PVC protective footwear). Our commercial relations with the Romanian partners are good. For the time being our balance of trade is negative but we hope that our bilateral exchanges will be equilibrated because Romania has a high economic potential, capable of absorbing ever larger amounts of products. We wish to expand and intensify our collaboration with Romania, a country which enjoys great prestige in our country, especially through President Nicolae Ceausescu's actions and initiatives meant to



DAVID SILBERBERG,
Director of Israel's Pavilion

Our pavilion at TIB '88 is larger than last year, which shows our wish to intensify and diversify our business relations with Romanian partners. There are 11 exhibiting companies, among which Shabun Ltd. which represents the interests of seven firms. These firms, which have had ties with the Romanian market for 13 years, exchange various products with the Romanian foreign trade enterprises: Tolmimporlexport, Itecon-lexim, Arpimex, Delta, Carpath, Romanexpimport, and Terra.

One of the firms in which Romania is interested is undoubtedly Anin Control Systems Ltd. which, although a newcomer, has already made a name for itself through its solar installations for heating domestic water, a few of which are in service in Bucharest, at Marea and at the Cola 1400 plant. This firm has come to TIB '88 willing to cooperate with the Romanian side on the manufacture of such installations and their delivery to third markets.

Other firms exhibiting within our pavilion under the aegis of Shabun company are: Mepro (specializing in the production of barrels and electric duplicating machines), Englander (manufacturing stamps for high-precision parts used in the electronics industry and for micro-motors, C.D. which produces general wraps), Lohavos (supplying fire extinguishers), Davik (manufacturing adhesive tapes), Aconor (selling fruit juice), Microcholine (detergents and marble polishing and cutting), Paskal (manufacturing zippers by injection), Elan (footwear) and Darna (PVC protective footwear). Our commercial relations with the Romanian partners are good. For the time being our balance of trade is negative but we hope that our bilateral exchanges will be equilibrated because Romania has a high economic potential, capable of absorbing ever larger amounts of products. We wish to expand and intensify our collaboration with Romania, a country which enjoys great prestige in our country, especially through President Nicolae Ceausescu's actions and initiatives meant to

(cont. on p. 6)

A rich offer of farm machines and tractors of the last generation catches the specialist's attention (top and bottom). An important manufacturer of energy equipment, IMCI, has also embarked on producing engines for nuclear power station turbines (middle).

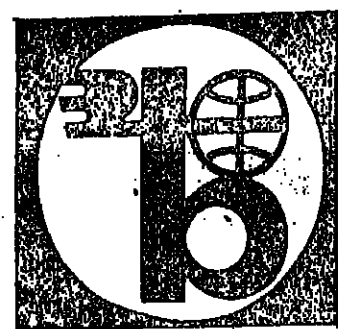
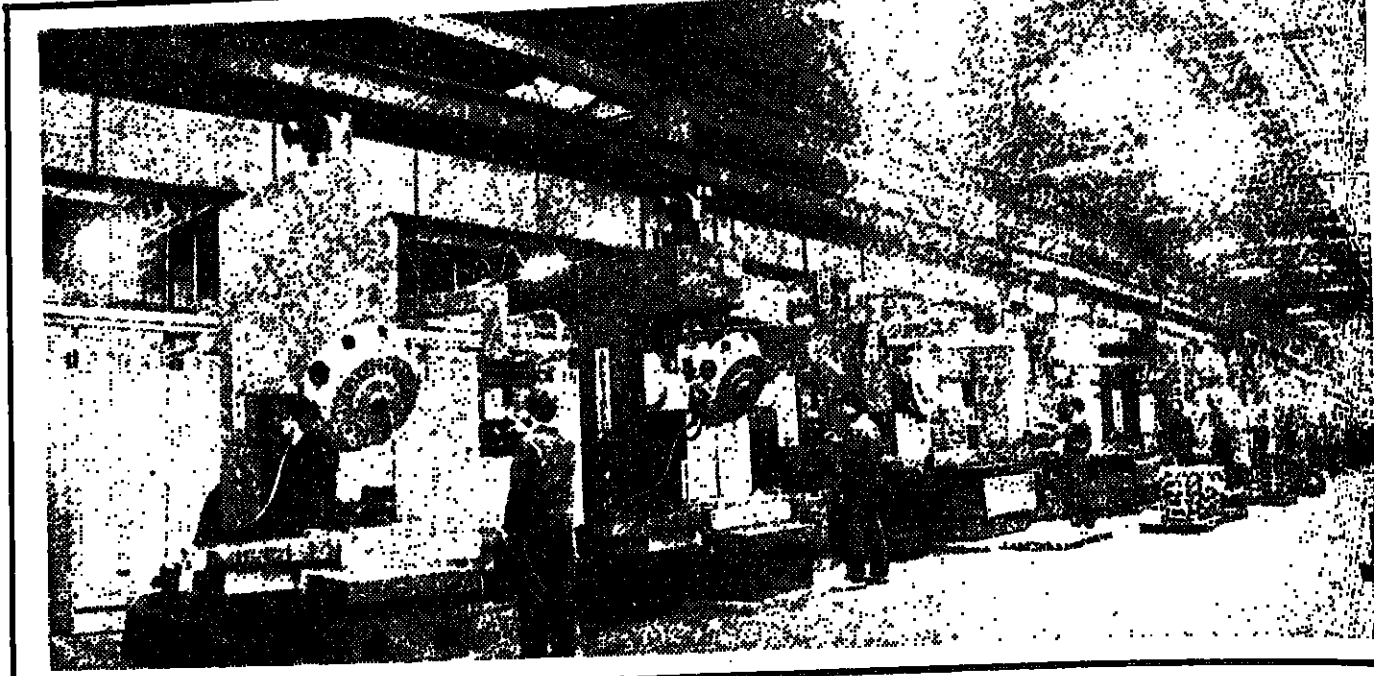
(cont. from p. 5)
lead to the establishment of
factories in the Middle East.
That is why we shall come to
the next edition of TIB too, as
this is an event with which we
are very pleased and which sur-
passes itself from one year to
another.

T. HARA,
Director General
of Ikehara Corporation
(Japan)

Here we are in Bucharest for
the second time around. We
have come to the Bucharest In-
ternational Fair with a stand
larger than the previous one,
reflecting our wish to de-
velop our business with the Ro-
manian partners in the next
year by diversifying our mutual
exchanges.

The evolution of our trade re-
lations with Romanian partners
has been good for almost 25
years now. From Romania we
buy large quantities of metal-
lurgical items and rolled goods
of aluminum, steel, etc. and we
sell raw materials for iron and
steel products, especially metal-
lurgical coke and baking coal
for the large Romanian iron
and steel works.

We are satisfied with the
quality of the products imported
from your country and that is
why we have contacted a series
of Romanian leading specialists
with a view to identifying new
ways concerning the expansion
of the bilateral economic colla-
boration. We are optimistic
about our new participation in
TIB and we can already tell
that we shall not miss the next
edition of the International
economic and commercial event
staged in Bucharest.



FROM THE ROMANIAN OFFER

ION BALANUȚA,
Director of the
MAȘINEEXPORTIMPORT
Foreign Trade Company

At this year's TIB too, our
company has displayed proofs
of the growth and moderniza-
tion of the Romanian machine-
engineering industry, of its high
technological level on a par
with the latest breakthroughs of
science and technology.

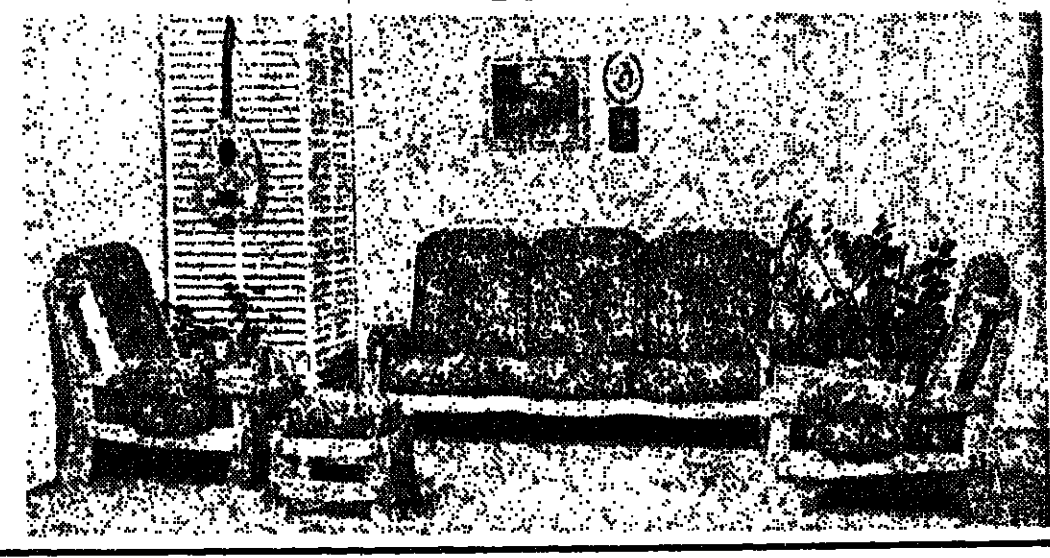
Mașineexportimport, a well
known and unanimously appre-
ciated firm, as a representative
in terms of foreign trade and
international economic colla-
boration, of over 50 large and me-
dian enterprises manufacturing
machine tools, equipment and
installations, has put on view

an updated, high-tech offer:
specialized machine tools, trans-
fer lines, automated production
and assembly lines, parallel and
vertical lathes, longitudinal and
portal cutters, boring and jig
grinding machines, etc. In fact,
Mașineexportimport is the general
supplier of the following
groups of export-bound pro-
ducts: machine tools for metal
processing through cutting com-
plex lines, individual machines,
subassemblies, parts and acces-
sories; machine tools for pro-
cessing metals through non-
conventional methods (electro-
erosion, ultrasonics, laser,
etc.); machine tools for metal
processing through deformation,
cutting tools and dies for pre-
cision forging, mechanics and
pneumatic hand tools; com-
plex installations, machines and
equipment (as well as acces-
sories and parts for them), for all
light industry branches; and
the durable, cooking stove at-
tached to electric heating
apparatus, enamelled dishes,
gaming devices, accessories
and various other metallic pro-
ducts.

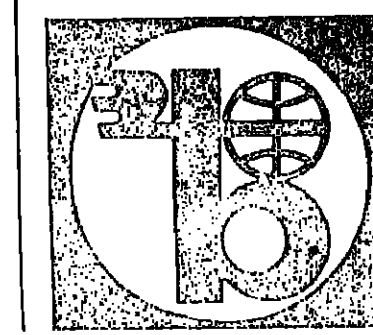
At the same time, Mașine-
exportimport contracts with in-
ternational trade within a
single network, known as Pe-
chiney World Trade, (PWT)
present in many countries.

trucks and tip lorries of seven
and 10 tons and autotractors of
40 tons made at Brașov, which
are sold in America under the
trademark of DAF.

At the same time the Ameri-
can guest underlines his good
collaboration with the Autobu-
zului plant of Bucharest in man-
ufacturing the ROFAR 100 bus
for 18 passengers. Taking into
consideration the keen interest
shown by our buyers, the Ameri-
can firm has organized a broad
selling and service network.
ACC helped promote the ARD
land rover on the American
market, supplying it with a Ford
engine and offering it to buy-
ers through the Ford distribu-
tion network, meaning that the
Romanian car designed for the
US and Canada successfully met
the exigent American standards.
In the US there is an assembly
line for ARD and Gavin trucks.
It is convinced that next year
its company will sell 6,000 piece.



seller to and buyer from Roma-
nia has substantially increased
in the last years, becoming one
of "Mașineexportimport's" biggest
business partners. PWT supplies
the Romanian industry with a
great variety of products, from
raw materials and refined me-
tals to noble ferrous alloys, sheet
for the aircraft industry and
latest chemical substances.
In its domain of activity,



The American guest shows
his satisfaction at the coop-
eration and commercial relations
with Romanian partners, declar-
ing his intention to seek new
common fields and projects be-
neficial to both sides.

B. POUX-GUILAUME,
President of Brande's Ltd.,
Vice-President of Pechiney
World Trade

Pechiney, the big French in-
dustrial group specialized in
metals is powerfully represented
at TIB.

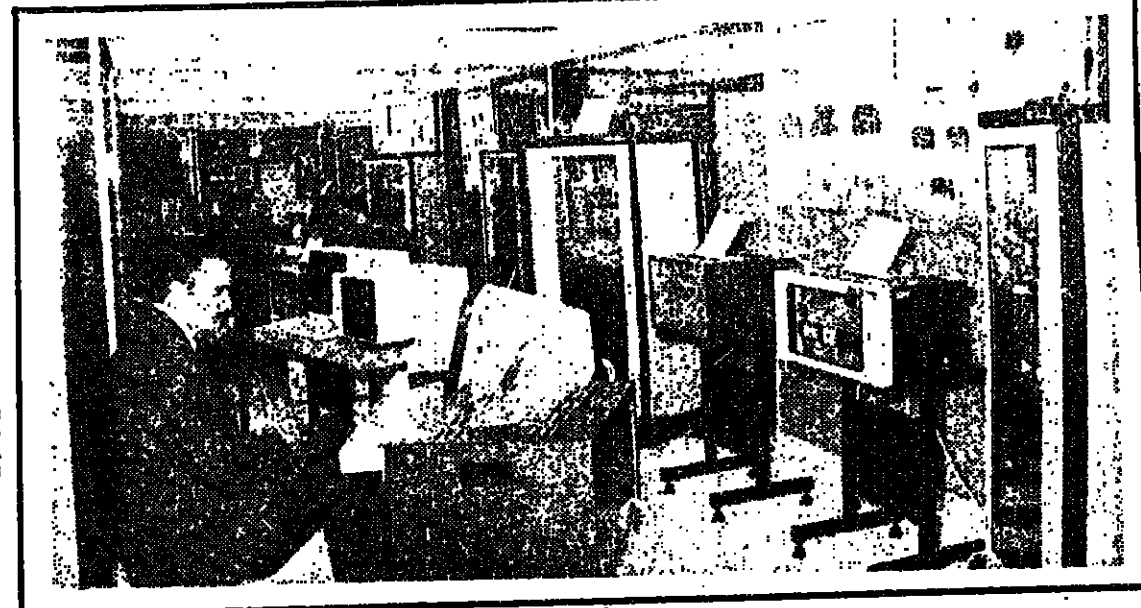
Since Pechiney technology of
aluminum reduction was used
for the construction of the Sla-

via furnace in 1964, technical
contracts between the Roma-
nian industry and the French
group were close and regular.
In the field of magnesium, aluminum
and titanium had numerous dis-
cussions with Pechiney. The la-
test of these projects could not
be materialized yet but the con-
tact has been maintained.

On the other hand, commer-
cial exchanges have been very
active all this time.

In 1981, Pechiney united its
various subsidiaries, organized
in international trade within a
single network, known as Pe-
chiney World Trade, (PWT)
present in many countries.

In Romania, PWT operates
through a Bucharest representa-
tive office supervised by Mr.
Gheorghe Nanas. Its activity as



FROM THE ROMANIAN OFFER

M. NEACȘU,
Director
of Tehnoforestexport
foreign trade enterprise

Tehnoforestexport's participa-
tion in the 1981 edition of TIB
which to us is the most impor-
tant action at promoting the
Romanian exports of finished
wood products, has led to the
conclusion of a larger volume
of orders both with our traditio-
nal business partners and with
new firms which will gradually
become constant importers of
our products. In the coming
editions of the TIB, the finished
wood items made in 1981
manufacturing units.

At TIB '81 we have exhibited
a wide range of new furniture,
bedroom, living room, dining
room, kitchen, bathroom, and
children's furniture, as well as
handicraft objects manufactured
in major woodworking enter-
prises.

The prestige and positions ac-
quired by Romanian finished
wood products in the world
market.
Romanian furniture, which
won the International Promot-
ion and Prestige Prize in Ge-
neva in 1971 and the Europe
Meuble Trophy in Valencia in
1978 and is known under the
Bosphorus trademark, is deliv-
ered to over 40 countries on all
continents, being highly appre-
ciated and in growing demand.
The rich and varied assort-
ment of oak, maple, beech, birch,
and other woods, and construc-
tional solutions, mainly
includes living rooms, studies,
bedrooms, dining rooms, bath-
rooms, kitchen furniture, youth
and children's rooms, kitchens
and garden furniture, and have
demonstrated the possibilities
of the Romanian furniture in-
dustry to meet the demands of
both the domestic and the for-
eign market. Its potential and
capacity for adapting to the
consumers' demands are as-
sured. As a matter of fact, Ro-
mania is at present one of the
leading world manufacturers and
exporters of furniture.

On page 8: The improved
machine tools, provided with
digital control and display,
made in Romania are to be
found in many machine
building enterprises in this
country and abroad (top,
middle and bottom). A new
utility van model, made at
the Autobuzul plant in Bu-
charest (middle right). On
page 9: Romanian furniture
has aroused the foreign cus-
tomers' interest. The large
number of beds constructed
(top and middle left). Roma-
nian-made computer technol-
ogy books (middle right).
Power equipment made at
TIB (bottom).

Pages written by
N. NEACȘU
Tehnoforestexport



DICK VAN MEURS,
Vice-President of the
International Commodities
Export Corporation (ICEC)
(USA)

The relations between ICEC
and Romania are stable and
of long standing. They were es-
tablished 20 years ago when,
together with the Chimica for-
eign trade company, the joint
Romanian-American society Ar-
mochem was set up, which has
conducted a sustained activity
for expanding trade relations
and, above all, boosting Roma-
nian exports. Armochem's im-
ports from Romania account
for three quarters the overall
volume of business relations;
they are mainly chemical fertil-
izers, plastics, paper, tyres,
rubber and rubber technical
items, dyestuffs. Our exports
consist of raw materials for Ro-
manian chemicals, which are
then sold through the interme-
diary of ICEC on the American
and various third markets. Tak-
ing into account the success
scored by this joint society,



GAVIN A. RUOPE,
Chairman of the
Compliance Corp.
(USA)

The American firm
has spoken with PWT
Congress at the
money, in fact, it
plays a role in the
Romanian economy.
The American firm
Universal Autotech
has, by the way,
been recognized with
their market. It is
in fact this firm
been contacted by
PWT. Mr. Gavin
has been in the
Romanian capital
for several days
and he is very im-
pressed by the
Romanian economy.
He is very im-
pressed by the
Romanian economy.
He is very im-
pressed by the
Romanian economy.

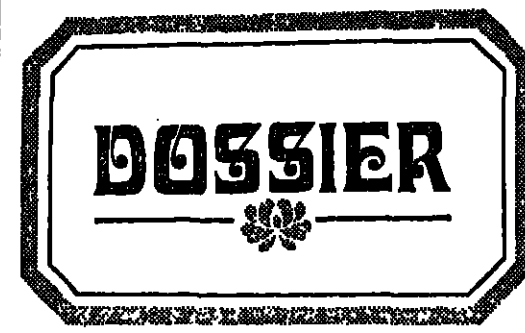
AN EXPRESSION OF THE ECONOMIC POTENTIAL
AND TECHNOLOGICAL LEVEL

RAILWAY TRANSPORT

• THE MAIN FORM OF GOODS AND PASSENGER TRANSPORTATION • A RAILWAY MAP WHICH STARTED TO BE DRAWN MORE THAN A CENTURY AGO • TWO DECADES OF STEADY DEVELOPMENT OF THE ROMANIAN RAILWAYS • FROM LICENSES TO ORIGINAL SOLUTIONS • RAILWAY PROJECTS ACHIEVED WITH STATE-OF-THE-ART BUILDING EQUIPMENT AND TECHNOLOGIES • THE IMPACT OF HIGH TECHNOLOGY • FROM THE STEAM LOCOMOTIVE TO UNCONVENTIONAL TRANSPORT SYSTEMS • ROMANIAN RAILWAY CARS ON ALL CONTINENTS

In Videle locality, a locomotive could be seen the other day rolling on the railway without a driver. No, it was no optical illusion. The locomotive was a Diesel one, controlled remotely from the tower of the Videle marshalling yard. This was the first marshalling yard in the Romanian railway network to be automated. The equipment and computer technology were entirely made in this country. But the "Videle cybernetic island", as the railway workers call it, is not an isolated island of state-of-the-art technology. Work is in progress now on the equipment of the Bucharest-Constanta railway (250 km) with automatic train control installations. The prototype has been executed and homologated for the remote control of electric locomotives from automated marshalling yards. One has also achieved and homologated a system of direct connection between the traffic dispatch office

and the locomotive driving personnel through the introduction of selective radio communications with the trains in motion. Scientific research, technological novelty and the introduction of technical progress have acquired special significances and proportions in the area of Romanian railway transport.



TRAINS BOUND FOR THE FUTURE

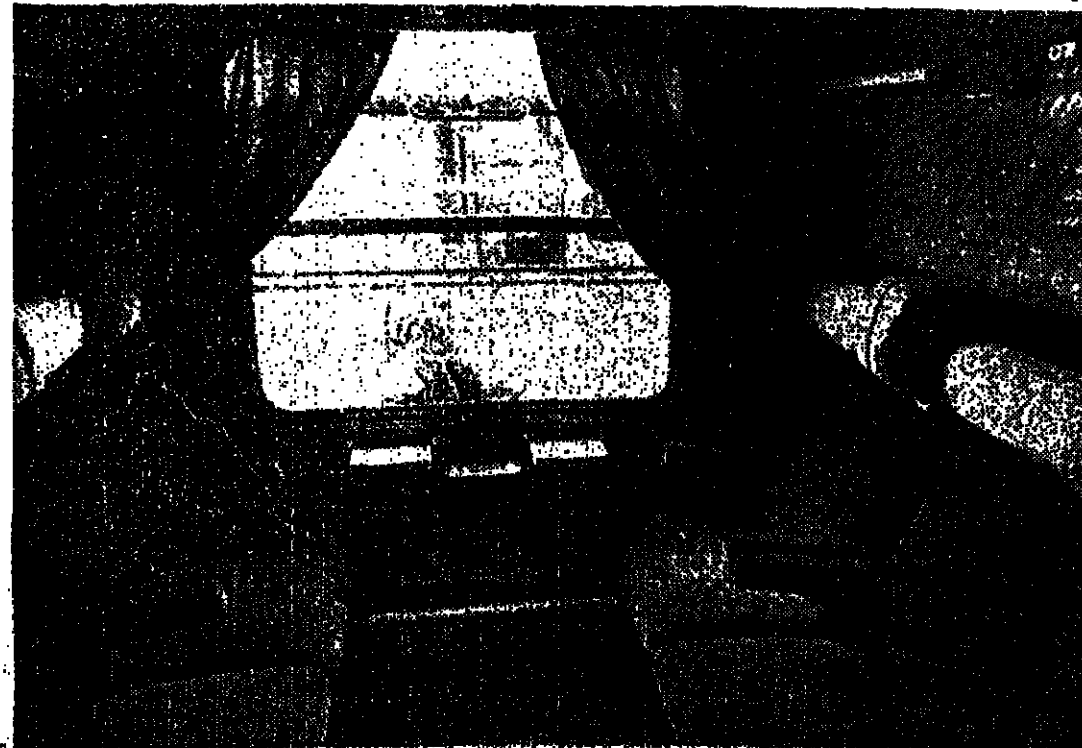
Romania's railway transport after the destruction caused by the Second World War was altogether precarious. As many as 30 per cent of the railways were closed, while the remainder allowed of extremely slow traffic. The car and locomotive park had sustained tremendous damage, and the "surviving" rolling stock was outdated. Railway transport has become inefficient, uneconomical and unsafe.

From the first postwar years, Romania's economic policy was oriented towards the fast expansion and modernization of the railway network. The progression of industrial production in the Romanian economic equation was not possible outside an accurate graph indicating the evolution of railway transport.

Naturally, with great financial efforts but also with a substantial contribution of professional competence, the Romanian railway establishment (CFR) perfected itself from an organiza-

tional, technical and technological point of view. Particularly in the last two decades steady efforts have been made to increase traffic capacities and improve traffic conditions on all the country's railways. Constructional solutions and execution methods have been updated. The mechanization and industrialization of works have been expanded. Works that were not only costly but also of great technical difficulty have resulted in the growth of railway transport facilities and of their capacity. Marshalling operations have been mechanized and automated. The locomotive and car park have been completed and the units for the maintenance and repair of the rolling stock expanded.

Compared to 1911, the length of the railways over Romania's territory has increased by 33 per cent, but two-track lines have multiplied 5.7 times, accounting at present for 85 per cent of the length of the main



line network. In just two decades which have elapsed since the official opening of the first electrified line in the country's railway network — that between Bucharest and Brasov, which was 170 km long — the length of the electrified lines has come to account for 70 per cent of the total length of the main line network.

Classical categories of works, such as pointwork or fire-mans, have been wiped out of

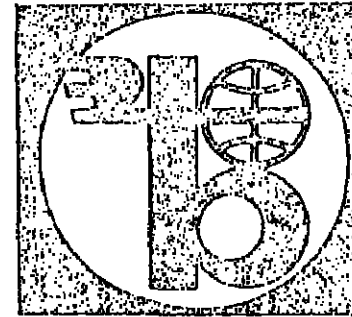
the nomenclature of railway professions. In perfect synchronism with European integration, the Romanian railway establishment has applied the latest technology in the field of railway transport, accumulating the most profitable results of the national economy. At present more than 10 per cent of the volume of passenger traffic

A MAP ON THE MOVE

A 30-page stamp was specially issued in 1987 for mail marking the Constanta-Cornavod route. It was the first European stamp having a railway theme. It shows a train entering Constantia port. But the Constanta-Cornavod railway is only the sixth-oldest line in Romania.

Beginning to be built in 1887, the railway was the first international railway line in Romania. It was built by the Austrian-Hungarian Empire. Under the Soviet rule, it was nationalized and became a part of the Romanian railway network. It is now a busy line, connecting the port of Constanta to the inland city of Cornavod.

ROMANIAN NEWS



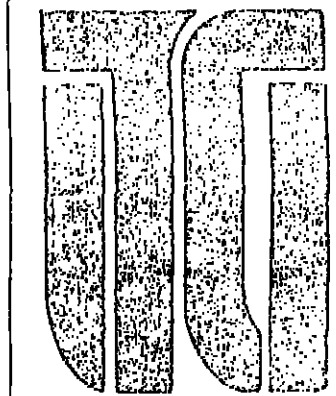
TECHNICAL AND COMMERCIAL ADVERTISING SUPPLEMENT

THE INSTITUTE FOR COMPUTERS AND INFORMATICS

The Institute for Computers and Informatics (ITCI) is mainly concerned with carrying out scientific research and technological engineering projects in computing equipment manufacturing and informatics, the small-scale production of computer technology, the design and setting up of turnkey computer systems, the organization, development and coordination of the software industry on a national level. As a consequence of the fact that the activity in the field of informatics has been organized in a systematic way, ITCI provides technical assistance for all the above mentioned categories of activities, helping end users gradually pass from the data processing to the new computer based information methods.

callon establishments and research institutes in Romania and abroad. ITCI promotes commercial relations and scientific cooperation with more than 15 countries, among which mention should be made of the USSR, People's China, the GDR, Bulgaria, Czechoslovakia, Hungary, Poland, Great Britain, France, West Germany, the USA, etc.

The long-term cooperation with computer technology manufacturing enterprises of Romania as concerns the installation of computers, operating systems, basic and applicative software for the end-users in this country and abroad has led to the formation of a body of specialists with a wide experience in providing technical assistance.



within the Complex Programme for technical-scientific cooperation of the CMEA member states.

Being involved in applications in fields of economic and social activity, ITCI has acquired a vast theoretical and practical experience, raising its data processing personnel to the level of the professional competitiveness required by the large scale utilization of informatics.

The organization of ITCI is flexible in relation with the requirements of the national economy and with the dynamic evolution of computer technology and informatics. The institute is organized on research departments and laboratories, production departments and workshops, technical assistance compartments. They carry out the following activities:

- research and design of modern computer technology (mainframe and large size computers, minicomputers, microcomputers, personal computers, peripheral equipment);

- for any application, to be used in hard conditions of functioning (for the extensive industry, steel works, chemical and oil platforms, for sea docks or docks embarked on mobile means, on caterpillar vehicles, on ships, and for the supervision and control of nuclear-electric plants);

- research elaboration and development of basic programs (operating systems, programming languages, processors and other utility programs) for all categories of computer technology produced in Romania;

- research and elaboration of systems used in the control of production and technological processes in the field of electronics, computer technology and informatics (machines building, chemistry, metallurgy, civil and industrial constructions, light industry, transport etc.);

- carrying out of basic research linked with mathematical modelling, official intelligence, expert systems, decision support systems at various levels of management, industrial robots and new generations of data processing equipment;

- maintenance, development and functioning of the National Program Library of Romania, by permanently modernizing the national stock of programs for electronic computers and delivery of programs for export;

- training and refresher courses for data processing people working in units using equipment manufactured in Romania, including courses in widely circulated languages for the benefit of foreign partners;

- tests and homologations of equipment, basic programs, applicative programs and information systems developed in Romania;

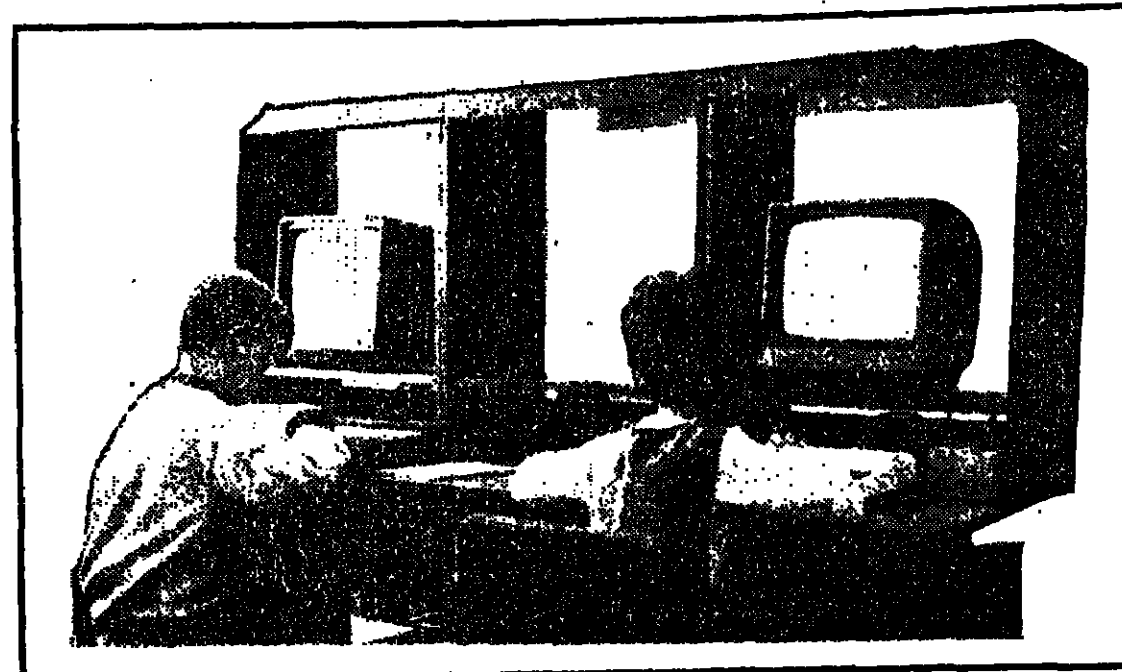
- consulting services and technical assistance for all problems in the field of computer technology and informatics;

- data processing, in their own computing centres, for end-users who do not have at their disposal equipment for automated data processing. On the basis of equipment prototypes worked out by ITCI, the Enterprise of Electronic Computers in Bucharest, the Enterprise of Peripheral Equipment in Bucharest, the Factory of Modules and Components for Computer Technology in Timisoara and the Enterprise for Industrial Automation of ITCI have assembled, in serial production, medium and large capacity computers, minicomputers, microcomputers, and special equipment based on data processing.

BADEA-DUMBA NICOLAE is Director of the Institute for Computers and Informatics in Bucharest.

(cont on p. 10)





ITCI — A MANUFACTURER OF COMPUTER TECHNOLOGY AND COMPONENTS

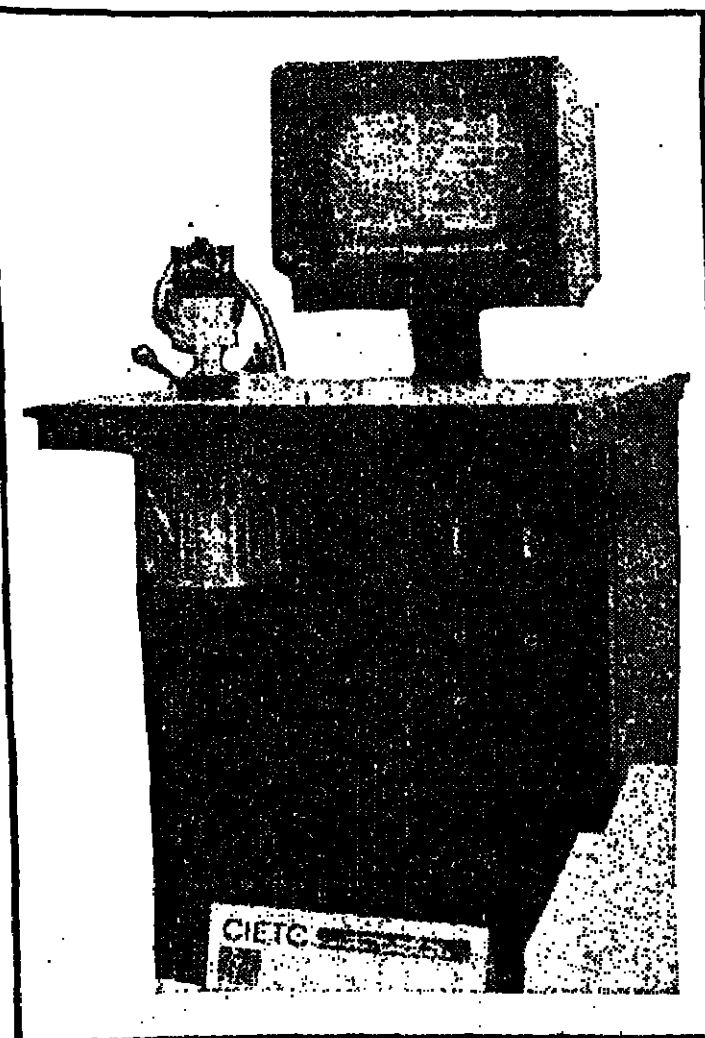
By turning to account the advanced technologies and projects resulting from the scientific research activity carried out in its laboratories, ITCI manufactures computer technology and components in its units of industrial microproduction and production:

- minicomputers for applications in aggressive industrial

control modules for peripheral devices and industrial processes:

- unitary carrying constructions for various types of computers
- high reliability equipment:

16 bit minicomputers in ATR enclosures, digital processing equipment for process control in nuclear-electrical plants, mini-



environments:

- integrated circuit memory modules: memory plates and memory units for computers and minicomputers, mass memories and modules with characteristics specified by end-users
- IBM-PC and SPECTRUM compatible personal computers, microcomputers using INTEL 8080/8086, ZILOG Z80/Z8000 microprocessors
- graphic consoles for users in industrial environments that are VT-210 and VT-22 compatible
- modular current sources: a complete family of 25 source types for 5 different output tensions (0-10 VDC) at 50 W, 50 V and 50 W
- electronic assemblies: con-

computers and electronic equipment mounted on vehicles:

- electronic equipment for computer technology production: EPROM memory programmers, specialized testers, minicomputer-aided test and diagnosis systems, circuit simulators

All installations are delivered together with complete documentation of presentation, utilization and quality attestation. We also offer a large range of services, such as: technical assistance for mounting and putting into operation, servicing in the laboratory and field, application training courses for the operation and exploitation of equipment etc., on a contract basis.

ITCI — A MAIN PROMOTER OF INFORMATICS IN THE ECONOMY

Starting from Romania's priority plans the industrial development of high quality programs and information applications is a central preoccupation in the activity of ITCI. Organized along the whole cycle (elaboration, implementation, technical assistance, maintenance, generalization, reproduction, distribution) the software industry becomes more and more important.

The general-purpose software products and the information systems, "turnkey" systems included, worked out at ITCI, cover a full range of applications, evincing the vocation of ITCI, at a national level, to introduce informatics society. An enumeration, even incomplete, includes:

- information systems and software products applied in

territorial management and at the level of large systems utilizing the computer networks based on communications and distributed data processing systems;

- real time information systems for the control at various levels, of economic units (industrial centres, enterprises, production sections and workshops);

- systems designed for the supervision, control of technological processes in various branches of the economy, its manufacturing of flexible automation included;

- systems designed for computer-aided design and manufacturing;

- control systems and simulators for railway and road vehicles, ships and aircraft;

- image processing systems for various application types;

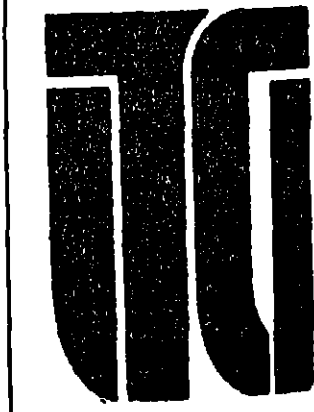
- CODASYL and relational data base management systems, for distributed data bases in local and global computer networks;

- decision making and other supporting systems;

- expert systems, systems for understanding and processing the natural language, systems for solving problems;

- data and information base management systems;

- standards, methodologies



and instruments of program engineering:

- computer-aided instruction systems;

- information systems for hospital management, for health care expert systems for medical diagnosis, program systems for technical medical equipment fitted with microprocessors

The computer programs, worked out in the laboratories of ITCI, which meet the functional and quality requirements of large enterprises and users, are homologated and brought to the level required by the standards, through the National Standards Library, a component which provides all software industry services to its end users.



ITCI — A VANGUARD ECHELON OF ROMANIAN RESEARCH AND TECHNOLOGICAL ENGINEERING

The strategy promoted by ITCI in scientific research and technological engineering ensures one's keeping abreast of development in all fields that are decisive for the progress of computer technology and informatics.

Thus, in the field of computer technology research work is being carried on in:

- new architectures and structures based on microprocessors, meant for future computer generations, DEO compatible minicomputers, advanced systems of information graphic processing, IBM compatible microcomputers, INTEL/ZILOG compatible microcomputers;

- systems of image electronic synthesis;

- new types of peripheral equipment for computers, minicomputers and microcomputers (external memory units, printers, digitizers, etc.);

- equipment designed for the control of technological processes for ETHER NET and BIT BUS computer networks;

- new types of specialized

processors for controlling various machine tools, for assisting aircraft navigation, for dispatching installations, etc.;

The research on the working out of basic programs and system utilities for the computing equipment manufactured in Romania is mainly carried out with a view to achieving the following types of programs:

- REX compatible operating systems (MIX system), UNIX compatible systems (U system), real time monitors;

- translators for FORTRAN, COBOL, BASIC, PASCAL, C, MODULA-2, ADA, LISP, PROLOG, SMALLTALK programming languages, etc.;

- translators for application-oriented languages (general-purpose simulation languages, simulation languages for Petri networks systems, description and control languages for applicative information systems);

- utility programs for all types of computers;

- management systems for all types of computers;

- management systems for telecommunications.

FOR ANY FURTHER INFORMATION, PLEASE CONTACT:

PRODUCERS:

ITCI — INSTITUTE FOR COMPUTERS AND INFORMATICS
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CARPATI — FOREIGN TRADE COMPANY

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TERRA — FOREIGN TRADE COMPANY

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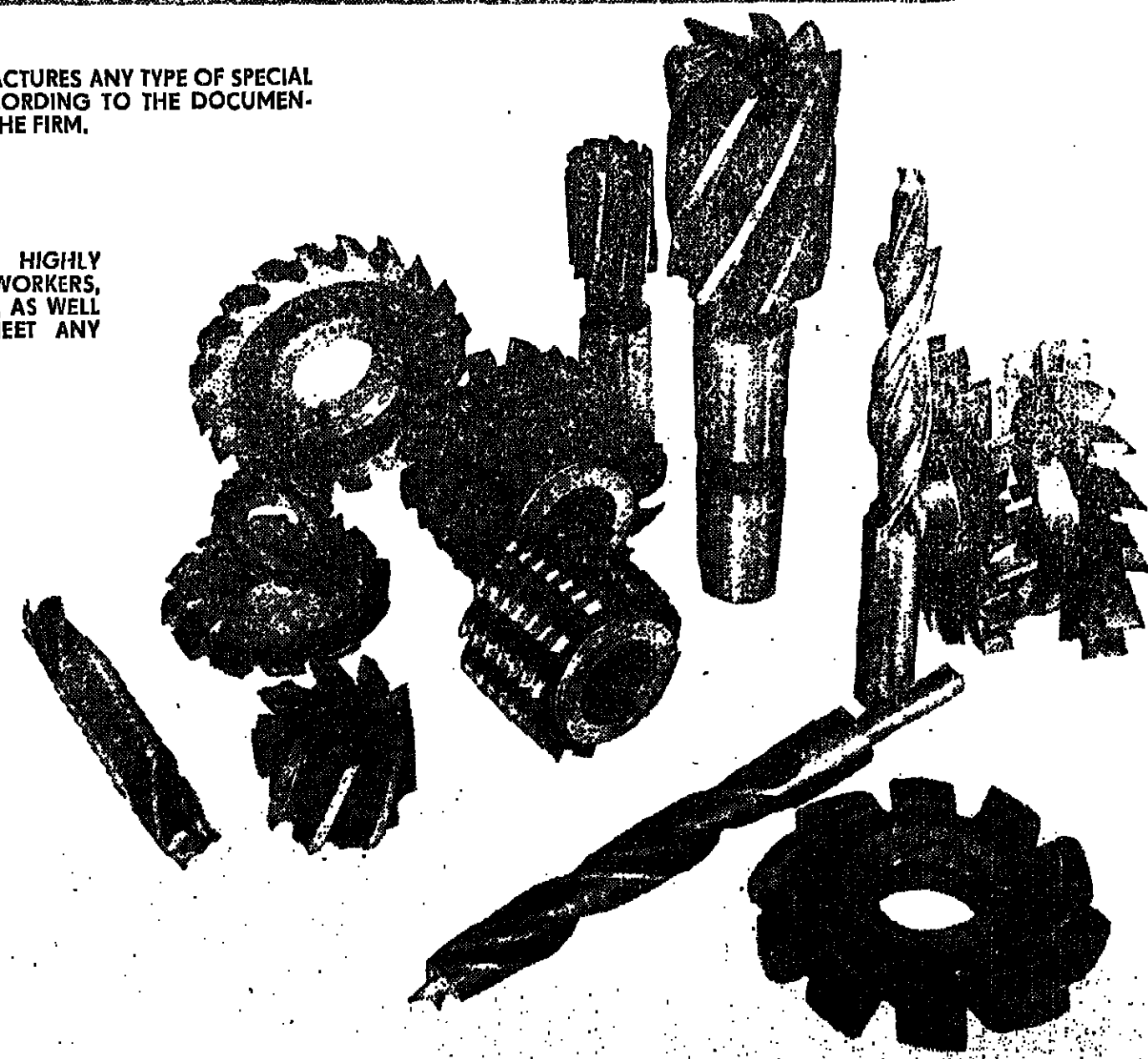
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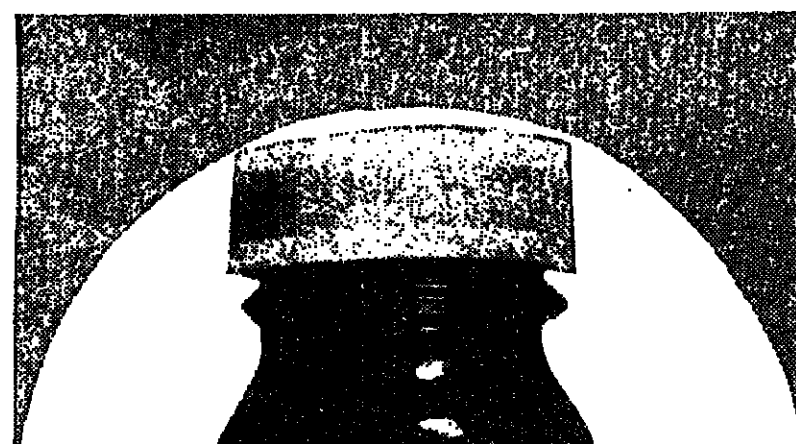
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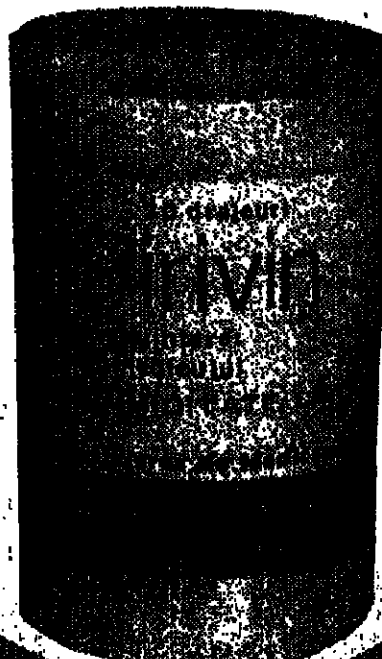
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PIRACETAM is recommended for involutional syndromes manifest through memory deficiencies, asthenia, adaptation disorders, perturbed psychomotor reactions; cerebrovascular accidents and cerebral circulatory insufficiency; chronic alcoholism and various toxicomanias; posttraumatic syndromes (headache, vertigo, agitation); infantile therapy to facilitate learning processes and improve intellectual performance, as well as for unsocial children.



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By applying up-to-date technologies and methods the Heavy Equipment Enterprise of Craiova manufactures and exports high quality goods through the agency of Romanian specialized foreign trade enterprises.

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- FLP 3100 portal milling machines
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- complex equipment for the pulp and paper industry

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- complex technological equipment for the iron and steel industry

Upon request, the Heavy Equipment Enterprise of Craiova can manufacture special machines, equipment according to the end users' documentation and other performance works like:

- complex metal structures for machine-tools
- equipment for nuclear electric plants
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- complete heavy reducers and products for metal-lurgy, ships, chemical, power industries, etc.
- spur gear or screw wheels with diametre ranging between 30 and 600 mm 1-30 modules (with generating milling cutters) and width to 2,000 mm
- straight bevel gear, $d = 35 - 500$ mm, $m = 1.5 - 12$ mm, and $B_{max} = 72$ mm, pitch cone length up to 200 mm
- driving spur gear or screw wheels, $d = 25 - 1,000$ mm, $m = 1.5 - 14$ mm, and $B_{max} = 230$ mm
- plain turning of cylinders and drums with $d = 2,500$ mm and $L = 10,000$ mm for diametres less than 2,000 mm, $L = 14,000$ mm can be obtained
- turnings, millings and broachings on vertical lathes for cylindrical parts with $d = 8,000$ mm and $L = 3,000$ mm
- slide, surface grinding, etc. with widths up to 3,600 mm and lengths of 12,000 mm
- dynamic balancing of parts and subassemblies; $G = 100 - 90,000$ kg, $d = 50 - 5,000$ mm and $L = 250 - 15,000$ mm
- stress relieving through vibration
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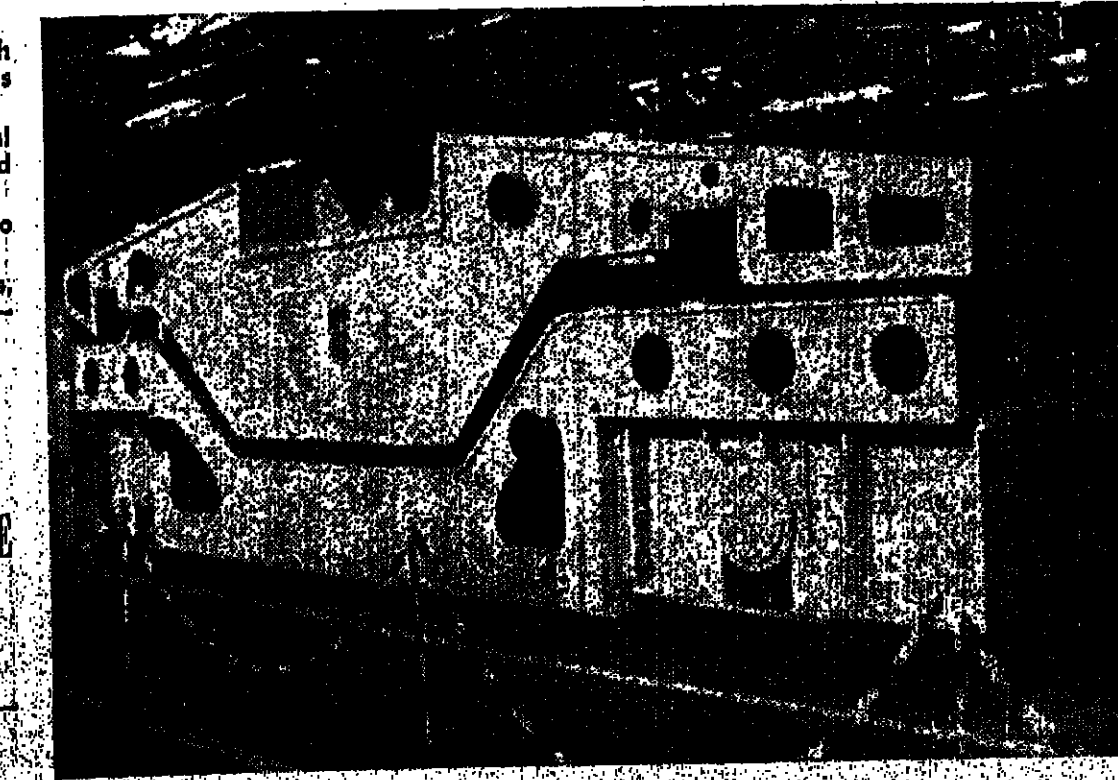
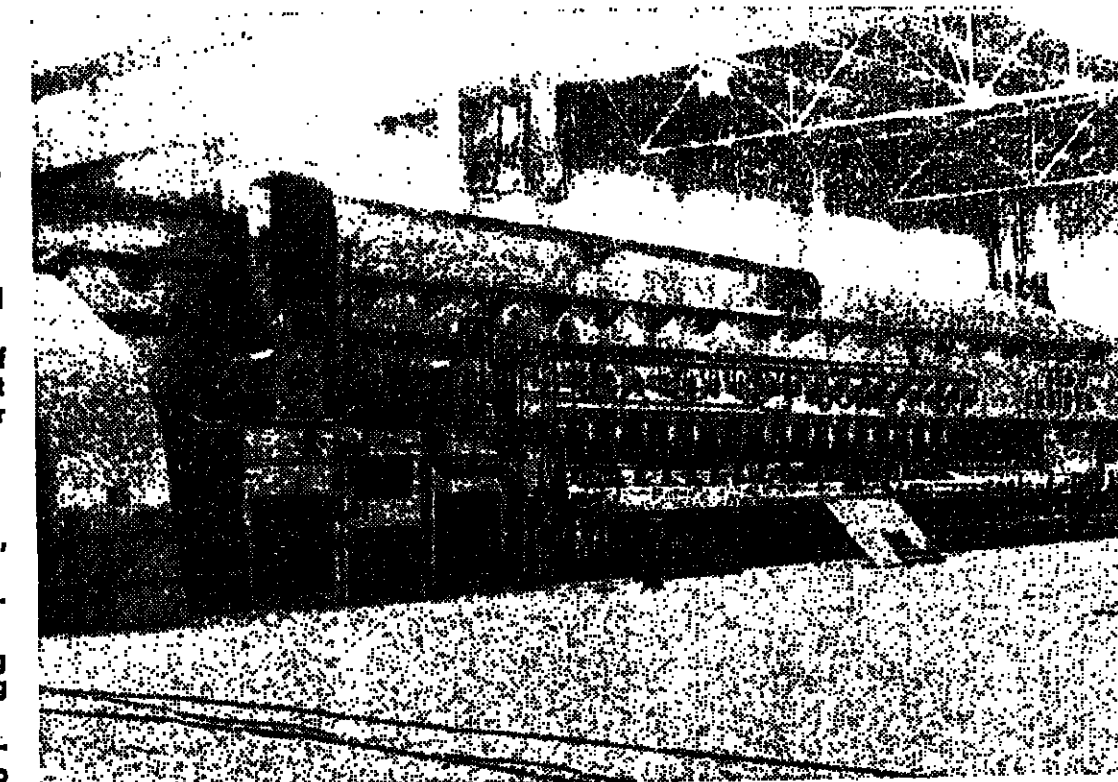
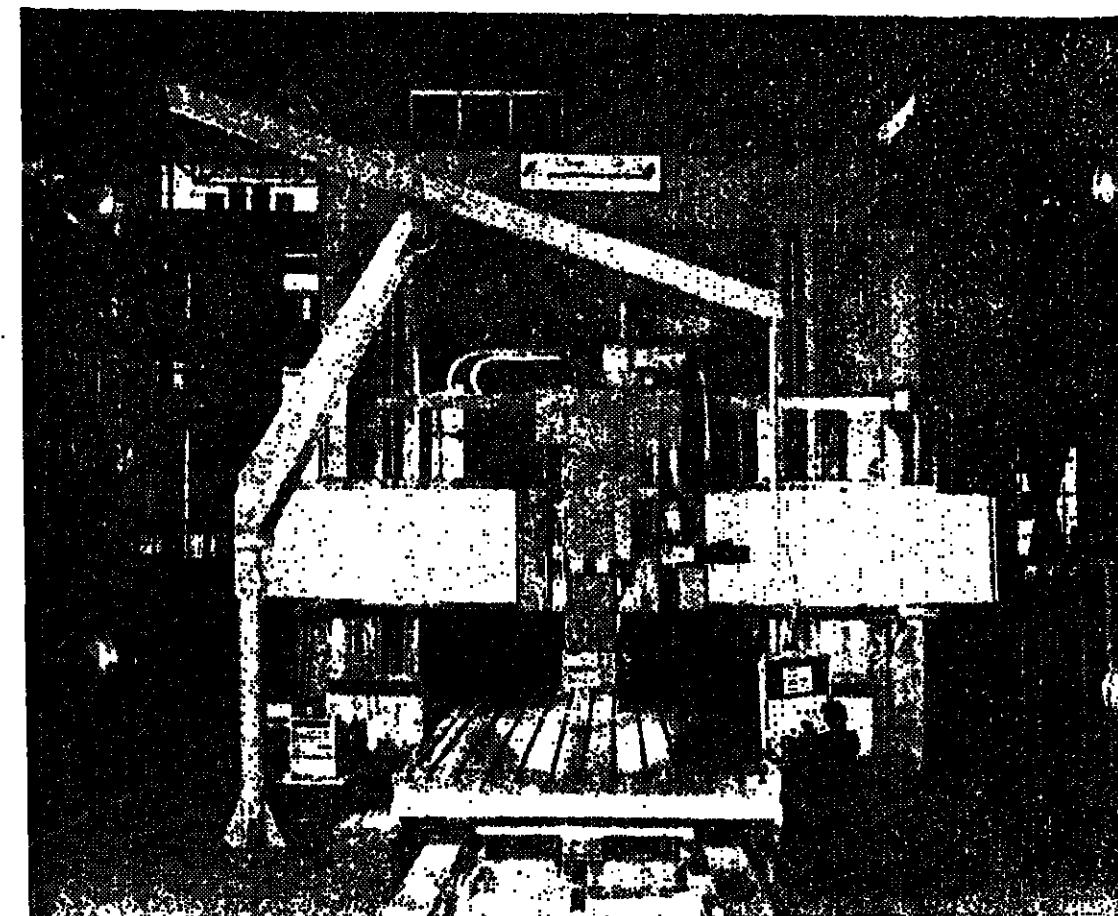
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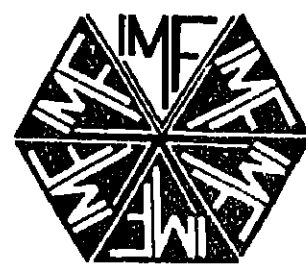
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THE FINE MECHANICS ENTERPRISE



YOU CANNOT PRODUCE WELL UNLESS YOU CONTROL!

If, generally speaking, "man is the measure of all things" as Protagoras put it, we must stress that the quality of your products and the productivity of your labour are strictly conditioned by the use of MEASURING AND CONTROL APPARATUS.

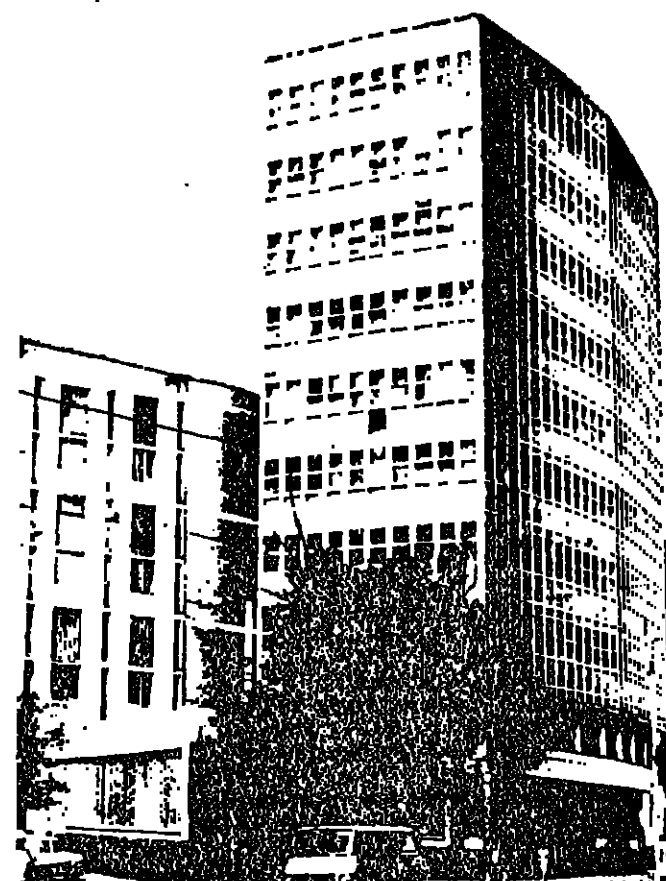
The post- or in-process sizing of your products supplies you the information through which you can become EFFICIENT as a producer.

It is this efficiency (viz. quality, producti-

vity, competitiveness) that the Fine Mechanics Enterprise (IMF) of Bucharest has in mind when offering its beneficiaries:

— measuring and control apparatus for lengths, pressures, temperatures, discharges, times and speeds;

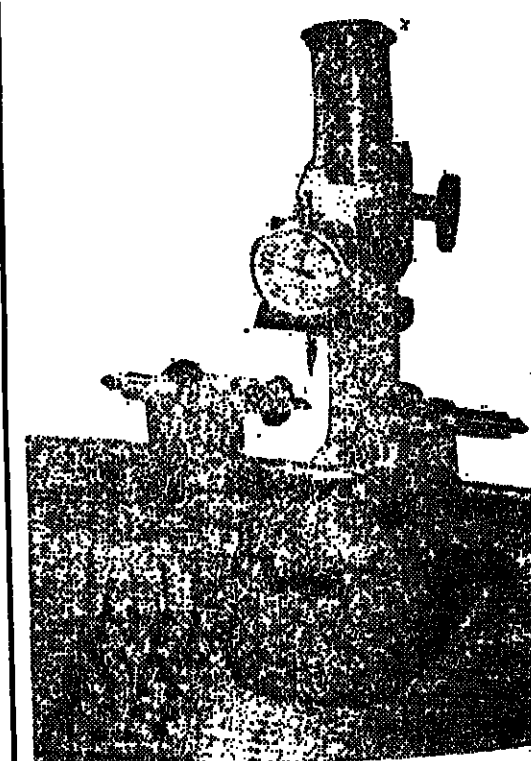
— special tools (diamond and sinter-carbide metal tools), holders, high-accuracy and fineness devices and dies, having a high degree of productivity and durability.



MEASURING AND DIMENSIONAL CONTROL APPARATUS AND INSTRUMENTS

● dial gauges ● bore dial gauges ● gear measuring instruments ● threaded conic gauges for the oil industry.

● circular dial snap gauges ● gear pitch-error and gear-tooth-thickness measuring instruments ● reading ball-gauges ● optical read-out devices and rules.



AUTOMATION ELEMENTS AND MECHANISMS

● Programmers ● electromechanical pulse counters ● programme control for automatic washing machines ● discharge counters with oval wheels ● electromechanical tachographs for motor vehicles ● complex speed measuring installations for locomotives and subways.

FOR PRESSURE INDUSTRIAL CLOCK-TYPE APPARATUS, INSTALLATIONS AND TEMPERATURE CONTROL

This apparatus family includes pressure switches and thermostats. They are indispensable in the automation of starting and stopping installations using fluids, whose temperature and pressure must be maintained within certain preadjusted limits. Pressure switches and thermostats are made of the Fine Mechanics Enterprise in a wide variety according to the pressures and types of motors they are mounted on, and the conditions of the environment.



IN- AND POST-PROCESS SIZING GAUGES

● They are built according to modern principles, with pneumatic inductive, piezoelectric transducers, whose signals are processed and displayed analogically or numerically in modular-type electronic units:

● pneumatic post-process sizing gauge — SUPERJET ● pneumatic post-process sizing gauge — ELSUPERJET ● post-process sizing gauge with electric contacts ● inductive electronic post-process sizing gauge ● roughness measuring post-process sizing gauge; smoothness measuring gauge (electronic levels).

● in-process sizing gauge for continuous exterior cylinder surfaces with one and two measuring points ● for continuous exterior surfaces and for continuous interior cylinder surfaces with two measuring points ● in-process sizing gauge for centreless grinding machines ● in-process sizing gauge for exterior diameters of narrow surfaces ● copying systems mounted on machine tools for processing through copying after a pattern.

REMEMBER THE IMF TRADEMARK



SINTER-CARBIDE METAL PRODUCTS

The main groups of products bearing the "CARME-SIN" mark — which are the object of the Bucharest Fine Mechanics Enterprise's production programme — are the following: sinter-carbide metal brazable tips and inserts for metal cutting; sinter-carbide metal inserts for mining tools; sinter-carbide metal inserts specific to the wood industry, building materials and extraction industry; products for drilling installations; dies for screws and nuts; dies for roll bearings; other types of products upon the foreign partners' demand.

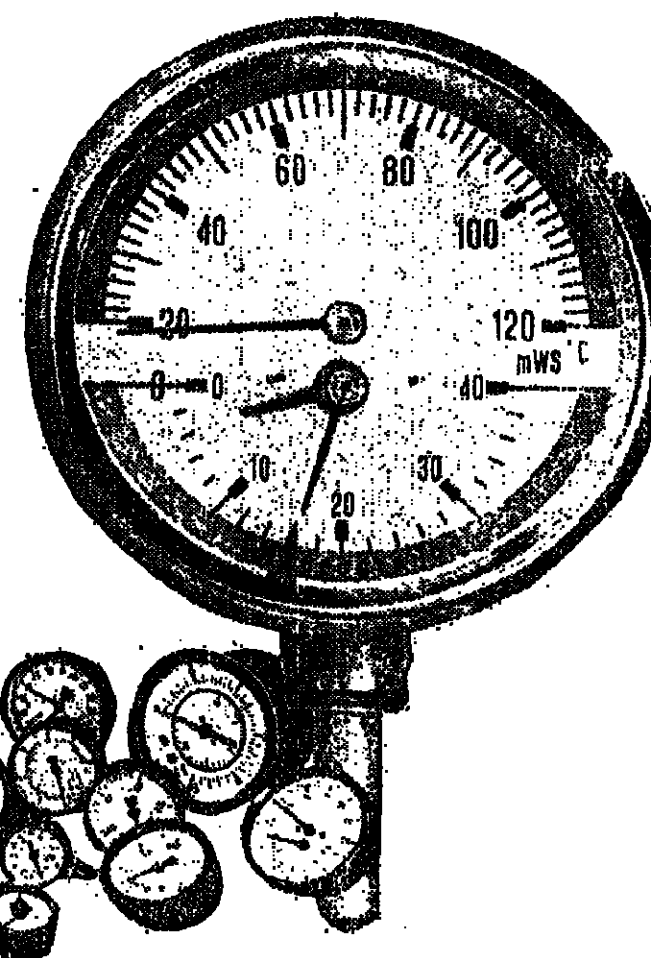
According to the concrete destination indicated by the end user, these products are executed out of the PKMG groups of carbide metal powder, after ISO international standards or according to other requirements specified in the order.

In order to increase the durability and performances of the sinter-carbide metal inserts, the method is applied of coating them with extra-hard layers of titanium carbide, giving the inserts an increased durability of up to 300 percent, as compared to the normal execution.



PRESSURE GAUGES

Through the great diversity resulting from constructive variants based on measuring limits, accuracy, diameter, connection and scale type, the Fine Mechanics Enterprise can satisfy the most exigent demands of its clients (standard pressure gauges or of special construction, upon demand). There are: ● general use industrial manometers ● vibration-proof manometers ● corrosion-proof manometers ● capsule-manometers ● double indication manometers ● manometers-thermometers.



DIAMOND TOOLS

The processing of ferrous and non-ferrous metals, of sinter-carbide metal, stone, concrete, ceramic and glass — through modern methods — calls for the use of diamond tools on an ever larger scale.

The manufacturing programme of this kind of tools is achieved at IMF on the basis of the licence purchased from WINTER firm of West Germany and is currently in full swing as a result of the growing demand. It comprises the following more important groups:

— diamond mills with metallic or resin-

ous binder of various shapes and sizes, with cubic boron nitride.

— diamond tools for construction-material processing
— diamond tools with galvanic binder
— honing diamond blades
— diamond pastes
— diamond tools for trimming and shaping abrasive stones
— chambering tools with extra-hard materials from diamond polycrystals or cubic boron nitride
— diamond drawing dies.

AND THE EXACT TIME

WHICH YOU CAN LEARN AT ANY MOMENT BY LOOKING AT THE DIAL OF THE WATCH WHOSE TRADEMARK OREX IS A GUARANTEE OF ACCURACY, BUILT IN SEVERAL HUNDRED MODELS BY IMF, THE WATCHES — MECHANIC OR QUARTZ-BASED ANALOG — MEET THE FINENESS OF YOUR AESTHETIC TASTE AND GIVE YOU THE EXACT TIME.



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MINOLTA GREETSS ROMANIA

MINOLTA's philosophy is to view copiers and the technical assistance granted to end users as a whole. It is easy to expect the most of the inventiveness or the products of a big producer, but the fact that a customer takes it for granted that he benefits by the best technical assistance means much more to MINOLTA. This is the reason why copiers, laser printers, telefax and text systems come ever more frequently from MINOLTA.



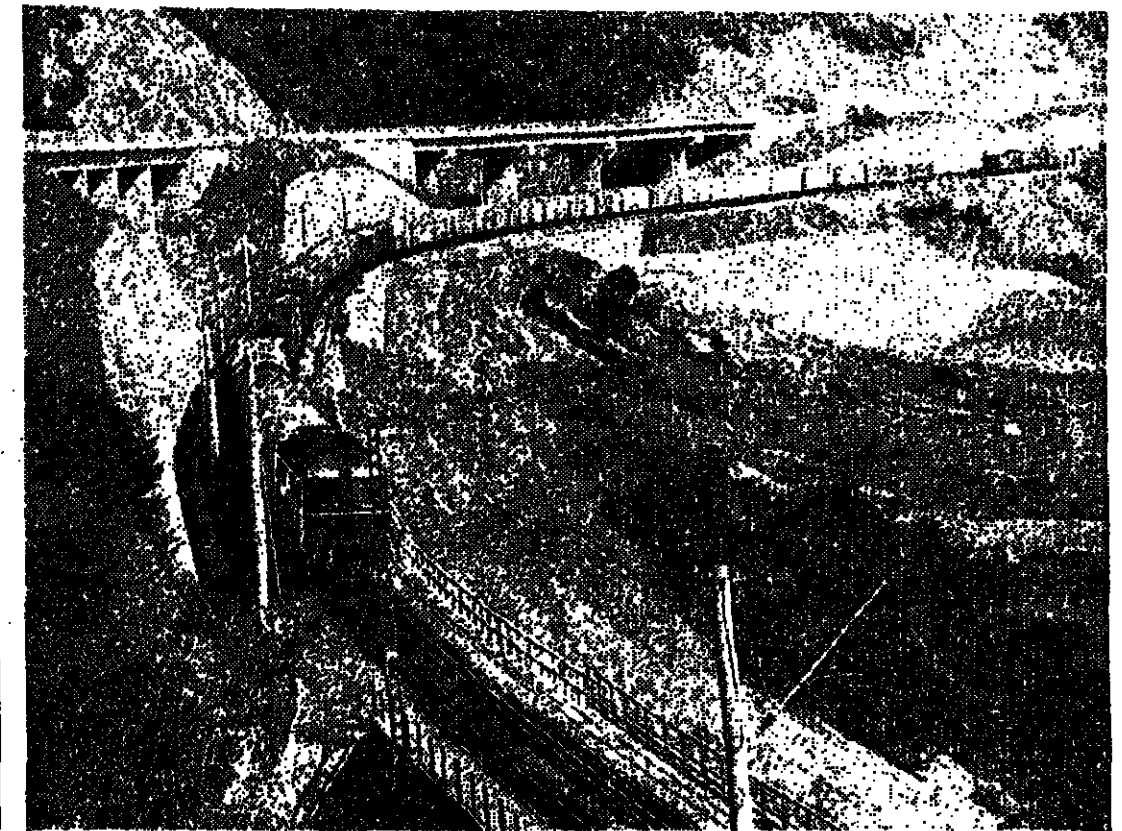
MINOLTA (AUSTRIA) SA...
SERVICE ORGANIZATION...
REPRESENTATION IN ROMANIA...

a fraudulent bankruptcy in Russia. The Strusberg affair kept public opinion in eastern Europe under strain for one decade, between 1971-1980. This episode was not unique in the construction of the railway network. Despite real efforts, the country's heritage of inappropriately built lines, uncompleted because of unfavourable circumstances, technical deficiencies or hostile natural elements was quite large. The progress made in Romania's general economic development of the last two decades has made it possible to achieve railway projects which had long seemed impossible, from a technological or investment point of view.

The inhabitants of the Moli Land did not have a railway connection with the rest of the country until 1978. Steel rails had started being laid out between Deva and Brad in 1939 but the project was soon abandoned, to be resumed in 1942

and then in 1960 when the Minia-Stoeneasa and Brad-Dealu Fetii ends of line adding up to 22 km were built, 13.9 very difficult kilometres still had to be laid out. It was only in 1978, when, benefiting by mechanized installations and original technological solutions builders boasting a rich experience gained on the country's great construction sites managed to lay the track in the hard rock of the mountains and the clay of the hills. After nine years during which more than one million cubic metres of earth were dug, hundreds of thousands cum. of concrete were poured and tens of thousands tons of concrete and reinforced concrete prefabs were mounted, the 13.9 km still missing from the Deva-Brad railway finally spared travellers and goods the 200-km detour. On this short distance 77 bridges, 10 viaducts and four tunnels were built. The hostility of nature seemed unvanquishable especially at km 22.500 where constructors could hardly

On page 8: Special waggons carry the export-bound Romanian cars (top), the last checks before leaving the depot (middle), a first class passenger wagon (bottom). On page 9: A railway edifice in Mehedinti county (top), a rack engine which conjures up old memories (middle), the railway stations of Tulcea and Constanta are remarkable by their modern architecture (bottom).



THE "CIRCULATORY SYSTEM" OF THE NATIONAL ECONOMY

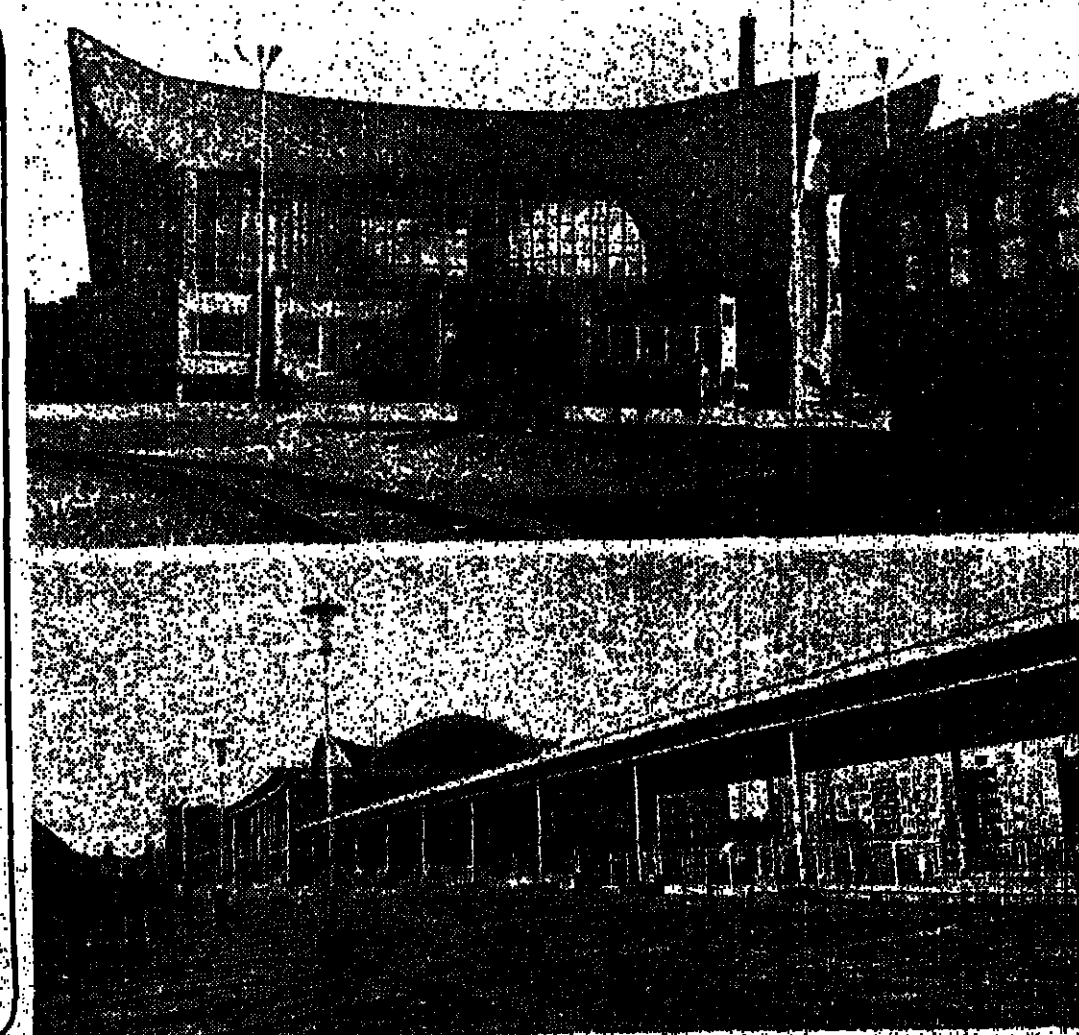
Transports play the role of a "circulatory system" in the country's economic and social life. Depending on the smooth running of conveyance means are the apparatuses supply with raw and subsidiary materials of all economic units, the uninterrupted flow of products meant for the domestic market and for exports, the flow of material goods destined for the population's consumption. In the unitary national system of transportation, the railway holds the largest share, meeting most of the needs of freight and passenger transportation. Last year national transportation recorded a volume of 2,821.1 million tons of goods and about 60 billion passengers-km. Railway transportation has been developed and diversified in keeping with the growth of the national economy. The locomotives and cars currently in service secure a low consumption of fuel and energy and allow of applying the most complex systems of loading-unloading operations, being perfectly adjusted to combined transportation flows. Railway transportation is currently the cheapest means of conveyance, accounting for a reduction in shipping expenses in the overall production material expenses and in the social product.

Further to be expanded is the containerized and transcontinentalized transport.

The existing rolling stock will be added big-capacity cars and cars for transporting materials, semifabs and finished products to the country's construction sites.

THE LEADING MEANS OF GOODS TRANSPORTATION

The railway is currently the main means of inland goods transportation. The material base of railway shipping has been continuously enriched with Diesel and electric locomotives and freight cars. Until 1990, the rolling stock is to grow by another 80 electric locomotives and 13,377 freight cars. Also pursued is the growth of the rolling stock usage indicators, the mechanization of loading-unloading operations, the expansion of containerization and transcontinentalization, therefore the elimination of "warehouses on wheels", the growth of commercial speed, the full utilization of the railway transport capacity, the diversion of goods from road to railway shipping. Construction-assembly investment funds are directed towards ensuring new, more direct transportation ways - saving fuel coal and raw materials. Consequently, the new railways for fuel coal conveyance will provide the most efficient link between coalfields and thermal power stations.

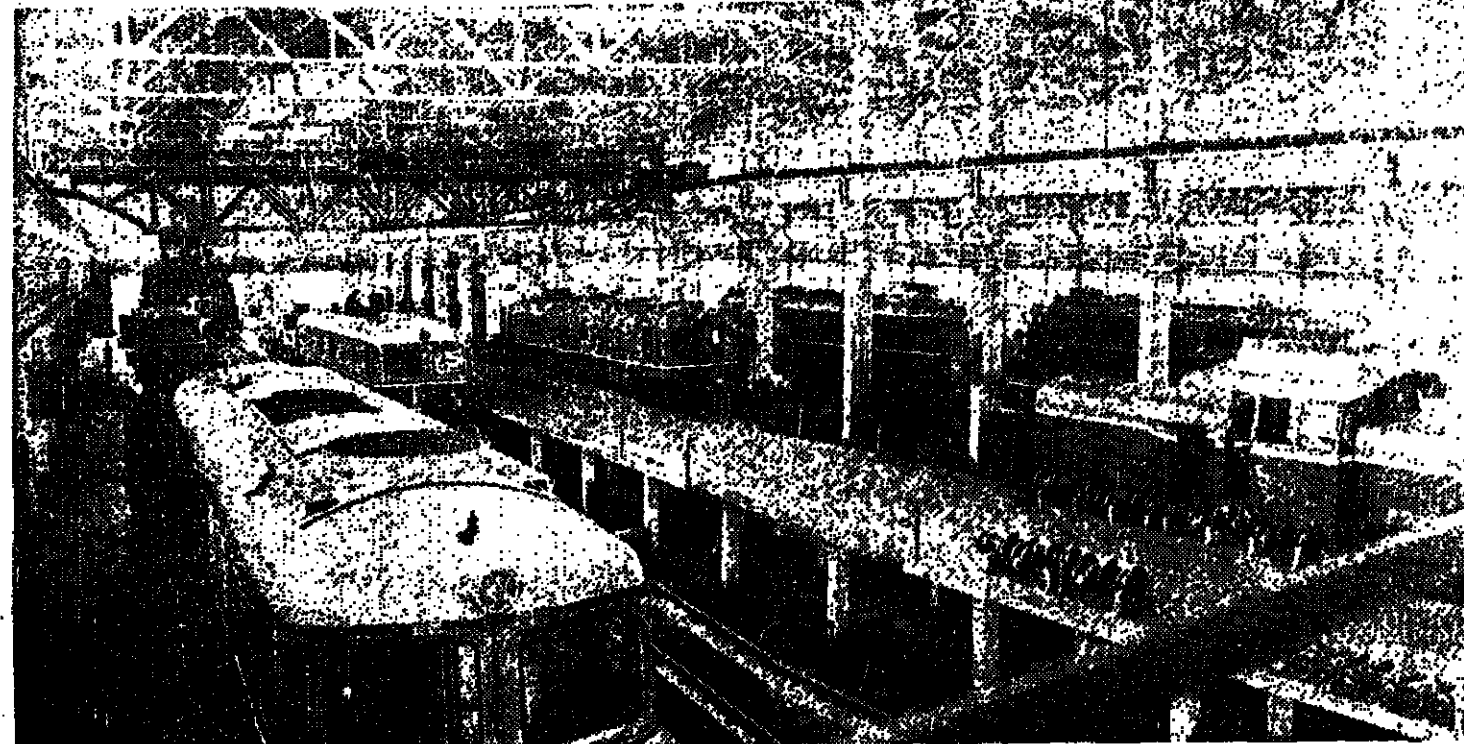


keep count of the measurements they had to take with the theodolite, as the ground was changing from day to day. Nature eventually yielded and for a year now two pairs of trains carrying passengers and two trains loaded with goods have been travelling on the Deva-Brad route every day, making the Moli Land to the country and fulfilling an old dream.

March 5 marked the completion of the structure works on the greatest railway project in the country, on the line connecting Vilescu to Râncuș Vilescu: the Topologul viaduct. On the "Sun's Railway", as builders call it there are 10 viaducts, two bridge-laid bridges, across the Argeș and the Ol. 128 foot-bridges, nearly 15,000 supporting walls. Perfectly integrated with the railway landscape is the highest (50 m above ground) and longest (1,350 m) viaduct in the country. Below, unsuspected by anyone, there are thousands of square metres of consolidation earthworks, ditches, millions of cubic metres moved around. The wind surpassed by 14 metres per second the limit speed allowed for launching the last precast concrete beam weighing 200 tons.

These pages of railway construction history would have been impossible to write had Romania not enjoyed the economic miracle enabling it to apply such innovative technological and engineering solutions. The most sophisticated installations working in the most intricate works of engineering nature, just as ambitious and tense as exports turned dreams into reality.

(cont. on p. 10)



- The first railway in Romania started to be built in 1816 between Oradea and Buzias (92.2 km), was completed in 1854 and opened in 1855.
- On October 31, 1959 was officially inaugurated the first railway in the USSR, the railway in the USSR, stretching between Bucharest and Giurgiu (95.8 km). The first train left from Filaret station (Bucharest) at 10.45 and arrived in Giurgiu at 12.13.
- The first narrow-gauge locomotive made in Romania (at Reşia) was put into operation in 1972.
- The Ruzdu-Mărcuș line was the first railway built by the Romanian state with Romanian engineers (1981).
- 1976 was the year when the first standard-gauge locomotive made at Reşia was delivered to the Romanian Railway Management.
- The first electric line, running between Buzău and Braşov, was opened in 1969.

HOW TO GAIN SPEED

A locomotive placed on a platform pulled by a convoy of several pairs of oxen went to the international exhibition organized in Vienna in 1873. It was the first locomotive built at the Reşia works, with a power of 45 hp and a maximum speed of 23 km/h. More than a century after this event, a collection of Romanian researches achieved in the electric machines lab of Timisoara the model of a vehicle on magnetic cushion meant for suburban transport whose prototype Magribus 92 has a capacity of 60-80 persons and a speed of 300 km/h.

How did the rolling stock of the Romanian Railway Company evolve in the period between the two events?

Steam locomotives were built at Reşia works and Malaxa works in Bucharest around the 1930s. With various improvements they reached the 150,000 serial number. But steam traction gave way to traction systems with higher efficiency: Diesel (1939) and electric (1939). The first Diesel-electric locomotive (Co-Co) of 2,100 hp which equipped the locomotive depot of the Romanian Railway Company (CFR) were made by "Electroputer" Works in Craiova, based on a Swiss licence. At present, Diesel-electric and electric locomotives have been completely assimilated in the Romanian production and are exported to a large number of countries in Europe, Africa, Central and South America, Asia.

The building enterprises collaborate in achieving big subassemblies with ICM Reşia

(where the Diesel engine is made) and ICM Caransebeş (boilers).

000-BA and 000-EA1 Romanian electric locomotives are among the most powerful and modern in Europe. The main building works is "Electroputer" of Craiova.

Here, and at the Arad Car Enterprise, the Bucharest Electric Machine Enterprise and ICM Reşia the electric multiple unit trains meant for suburban passenger traffic are serially produced.

Although many studies and researches are made on nonconventional transport systems, classical railway transport will remain the main land transport means. The classical traction rolling stock will be continuously improved. In the next two years, new products will be assimilated in the Romanian production: the 5,000-6,000 kV (Co-Co) electric locomotive with thyristor rectifier and electric recuperator brakes, 5,000-6,000 kV (Co-Co) electric locomotive with traction asynchronous single phase motors, electric multiple unit trains of 2,720 kw and thyristor rectifier systems, with recuperator brakes and completely suspended traction motors, etc.

The passage after 1959 from steam to Diesel-electric locomotives gave the possibility of increasing the trains' tonnage, the technical and commercial speeds. The novelty of the traction caught the car depot of the Romanian Railway Company with an old structure. The car structural elements did not correspond to the demands of the new locomotives. Also, from the

economic point of view, wagons were not fit. Most of them on two axles, had a small capacity (10-15 tons) and did not allow the mechanization of loading-unloading operations. The number of cars specialized according to the nature of goods was also limited, being oriented toward animal and cereal transportation. In 1968 a daring programme began for the equipping of the car depot. Newly designed cars were homologated. They were metallic, with axle boxes on bearings, big capacity axles (20 tons), suspension redesigned to the loading needs, big capacity friction buffers, a modern braking equipment and the most important, a unified one allowing the use of long trains and braking according to parameters imposed by the locomotive. In order to achieve these mechanical component parts specialized units have been built and commissioned in Romania: the bearing factory of Birlad, the axle

bogies and wheels manufacturing factory of Balu. Assimilated have been technologies using special steels. Over the same interval factories specializing in the construction of wagons have been brought into operation at Drobeta-Turnu Severin, Caracal, while the plant of Arad has doubled its capacity.

Launched has been the series production of completely metalized open freight cars for 60-t heavy axles supplied with a self-unloading system through the floor and of the metalized covered wagon on 60-t heavy axles. In parallel the production of special wagons has gained momentum. One of the first was a wagon designed for the transportation of cement on two 27-t heavy axles, provided with an efficient system of loading by gravitation from silo and pneumatic unloading, as well as the refrigerative car on two axles. The development

ment of the Romanian chemical and petrochemical industry spurred the fabrication of multiple-purpose fuel tanks. In the turn, flat cars transporting a wide range of industrial products have been diversified into adapted to the container system. The increasing degree of specialization of the enterprises has made necessary the production of an ever larger range of special wagons: wagons for limestone and soda, wagons for smoke black or cars, storage cars for motor-car transport, tank wagons for chemical liquids, wagons with mobile roof for timber or granulated or powder chemicals, etc. In order to ensure an economic efficiency and exploitation of these wagons designed exclusively for transport of certain products, most of them are owned and run by clients.

Aiding to all these types of wagons are various special loading and unloading devices adapted to the product to be transported.

Romanian-made goods wagons have been exported to all continents.

Locomotive overhaul room (top), the first railway tests (bottom), unloading the containers (middle).



In the light of the Programme of research, prospects and forecasts concerning the development of science, technology and technical progress in transport over the 1980-2010 (2020) period, the Romanian Institutes of research study the most advanced technical and technological solutions in the field of railroad transport. Specialists and researchers have in view the realization of new types of locomotives, engines, goods and passenger cars with higher technical and economic performance. Construction are envisaged (related to the installed power) by using aluminum, glass fibre, execution of the locomotives' box, light bodies. Specialists aim at a multipurpose utilization of the exploitation test and an easier maintenance. As far as passenger cars are concerned, there think of reducing the aerodynamic resistance and the effects of aerodynamic perturbation increment in the comfort offered to travellers.

At the same time specialists study the achievement of technological solutions for reaching high speeds in railroad exploitation. Railroad transport technologies in the conventional wheel-rail system with the speed of 200-300 km/h. Romanian specialists focus their attention on improving the existing system used in the railroad rolling stock, aimed at increasing the disc brake system to pneumatic and at pneumatic brake system with brake accelerator for goods trains. With a view to improving the quality of the technical condition of the rolling stock and increasing the safety of the train, specialized systems will be studied to establish the technical situation in the train, to detect faults and to signal them. All these projects will be achieved in cooperation with foreign scientific and technical centers.

PRIZE FOR MEDICINE

The proceedings of the 13th International Congress of Gastroenterology and of the 6th European Congress of Digestive Endoscopy recently held in Rome were also attended by Romanian physicians.

After listening to the 1,189 scientific reports and papers delivered, the jury awarded the Prize of the Congress to the work "The Treatment of Duodenal Ulcer and Ethoxysilamide (Ulosilvanil-E)". The work is the synthesis of a multidisciplinary study undertaken by a team of Romanian physicians headed by Ioan Pajules, MD, head of the Centre of Research in Gastroenterology Problems in Simleu Silvaniei, director of the town hospital in Zalau (Satu Mare county).

MINING TECHNOLOGIES

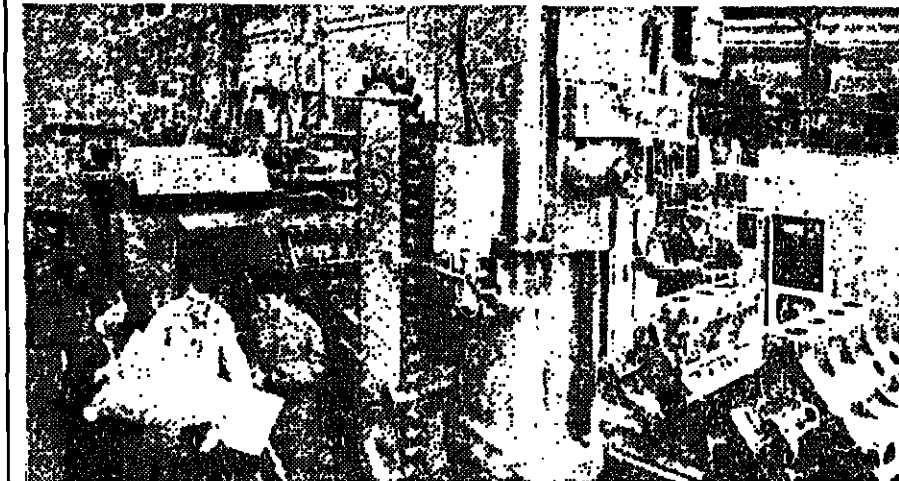
In the black coal mines in the Jiu Valley where no mechanized complexes can be introduced, a front gallery support technology has been adopted. The technological solution adopted (for thick bed stiles) consists in the setting of an artificial top made of supporting elements. This increases labour safety and boosts productivity up to 2-3 times of coal per workplace, compared to the old broken down so far. The new technology is already being applied in 48 Jiu Valley mines.

● The flotation line was started up at the new mining coal dressing plant in the town of Urziceni, Jiu Valley. This technological line which comprises equipment manufactured by the Romanian industry, recovers the fine coal grains, increasing by 2-3 per cent the degree of utilization of the coal extracted.

● The first technological line for excavation and transport was recently put into operation at the Ploiesti quarry of the Ploiesti mining enterprise, the youngest within the Romanian mining works. It is equipped with a giant rotary excavator EHC-1400 which excavates more than 130 m³ of earth in 21 hours. The quarry's capacity has been put at 8 million tons of coal annually.

● For the first time in Romania, the over 10 m high headgear of the city hoisting machine at the Valea de Braid mine within

the Valea Jiu Valley mining works was executed in parallel to the work on the drawing shaft, and on another shaft. Afterwards the headgear was moved to its definitive place above the shaft. Thanks to this original technology the time for assembling and opening the shaft at Valea de Braid was reduced by about six months.



BIG CAPACITY COMPRESSORS

Big capacity compressors D-120 and D-140 have recently entered series production at "Timpani Noi" Enterprise in Bucharest. In the above photo, an aspect from the processing section of motor blocks and compressor cases by means of the recently commissioned digitally controlled automatic guiding centre CPN-2.

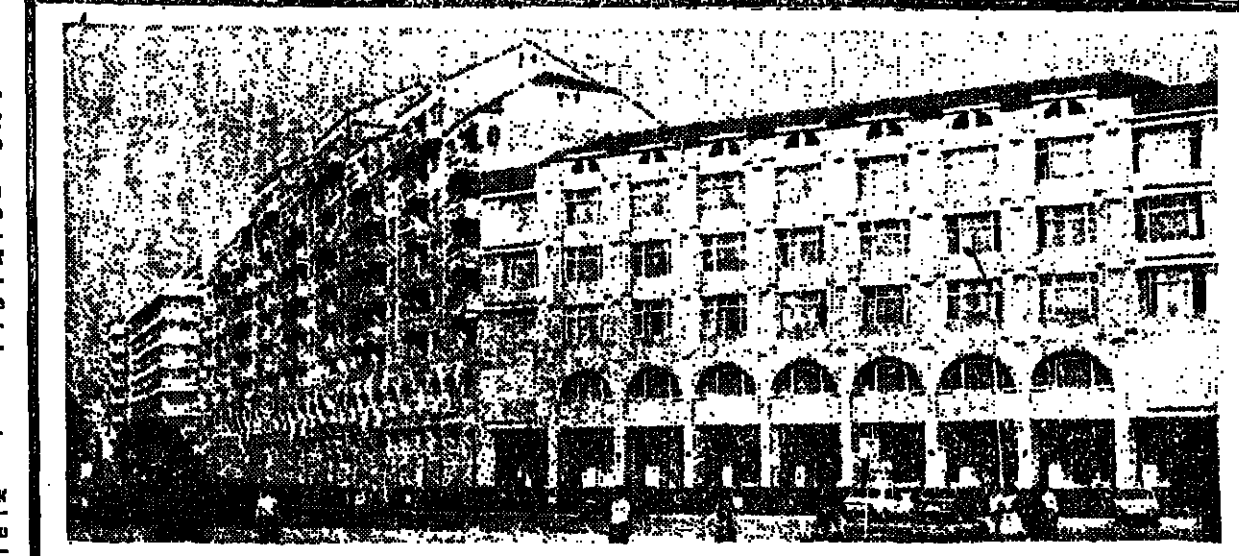


LABORATORY FOR SEEDS

At the research and production station for sugar beet cultures in the town of Roman (Neamt county) conditions of increasing this industrial plant's productivity are studied in labs. In the above photo, the utilization room where seed sprouting is observed.

WIND-POWER PLANTS

Twelve university chairs of the Polytechnic Institute in Timisoara, bringing together professors and students within a large multidisciplinary team, developed the first horizontal-axis wind power station in this country. The new type of wind turbines which have recently started being mass produced is using a multiple system of blades whose resistance has been calculated as to cope with any type of storm or wind speed, even with gusts of wind likely to occur once in 50 or 100 years. Mentionworthy is the fact that the blades of the Romanian turbines, though having the same installed power, weigh by 200 kg less than those manufactured by reputed firms basing a long tradition in this field from technologically advanced countries holding first places in the world as regards the wind power production. The installations, of great technical finesse bordering on that of aircraft construction, are currently being mounted on Semetie Mount. They have an installed power ranging between 300 and 450 kw.



Timisoara municipality, the old "princely residence" of Wallachia where important events of the Romanian history took place, which became county seat (Dinamo) after the 1968 administrative-territorial reorganization stands out as a town with modern architecture benefiting by all breakthroughs of civilization, having a flourishing economic, political, social and cultural life. A republican level steel centre where special and high-alloy steels are produced, Timisoara enriches every year its construction dowry with new industrial areas, new living and commercial areas, with wide boulevards and rest and recreation parks. We reproduce in the above photo one of the architectural land scapes significant for the town's new look.

SYNTHETIC FIBRES AND YARN

The Săvinești Synthetic Fibre Plant produces, among other things, installations of multi-synthetic fibre and yarn enterprises in Cluj-Napoca and Vaslui, polyamid and polyester fibre enterprises in Roman and Caracal. In the photo below, an aspect from the research lab for fine synthetic yarn. Below the research centre for synthetic yarn.



POTATOES GROW IN SAND

An average 15,000-kg-per ha production of early potatoes is satisfactory even in extremely favourable climatic conditions. The potatoes research and production station of Miercurea Ciuc county, scored this year an average crop of 15,150 kg per 400 ha of sand, where the humus coefficient frequently falls to reach at least one per cent. Smaller areas yielded even 25,000 kg of early potatoes per ha. Ten years ago large areas of sand laid waste, without use. Presently early potatoes are expanded throughout scores of thousands of hectares. The research station at Miercurea Ciuc improves the technology, establishes the best rotation of growth, fertilization recipes and irrigation methods.



THERMAL ENGINES

The Romanian car-making industry upgrades its engines. A series of new, improved engines have already been created for Daewoo. One of them is a Romanian-made integral engine, quite different from the Renault 11-ones. It will lay at the basis of a new generation of engines and cars boasting a sensibly higher quality. The Qtel motor cars will soon be provided with engines perfected as concerns both the fuel consumption and the considerable reduction of polluting gas components. Almost finished are research into a new family of Diesel engines of 4-6 cylinders which will be incorporated in ARD vehicles, provided with new solutions to speed spark ignition engines. Homologated are now a special equipment for the purification of polluting emissions by catalytic converters, as well as improved ignition and valve control systems.

EXPORT CONTRACTS

The absorption rate of the above photographed on the loading and delivery railway platform to be sent to foreign customers, is the sixth product of this kind finished, within export contracts by the workers, technicians and engineers of Buzău Technological Equipment Enterprise. Last month growing vessels, cargo decantation apparatus, filters, quasson pipes and technological equipment of special design were delivered to foreign partners. The enterprises, remarked by the consistent application of industrial flows of modern cutting and welding technologies which led to speeding up by 10 percent the planned internal and export production.

"CORSAR" ON LAND



C. MARIAN

WHEN OBSTETRICIANS GET TOGETHER

of medicine (Bucharest, Timisoara, Cluj-Napoca, Jasi, Tirgu Mures, Craiova), as well as specialists from other cities. Many scientific papers and discussions occasioned by the meeting turned into a useful exchange of opinions and experience on the treatment of certain diseases with a high coefficient of recurrence.

LOGICAL GAMES

MILENA MIHAESCU



NEW PRODUCTS

In the near future -
signior Marfana Genes -
creator of Netex, cotton
told us - we expect a
"explosion" of very fine
woven fabrics - (silk
grams per square
yards) which will be used in
apparel for other equally
materials. Silk is
them.

As part of these con-
text the unit has been con-
with a line for the pro-
duction of fine and very
understandings, which were
dist time manufacturing
the Metal Rose
in Cluj-Napoca.

M. GONSTANTIN

being able to change the moving elements, with a view to settling up conflicting situations, according to the lesson's theme. The trainee's manoeuvres and errors are signalled on the display as soon as they are committed. Thus they can be analysed at the end of the lesson and immediately by interrupting it.

Designed jointly with the experts of the Computer Technology and Informatics Institute, the simulator has been ordered by the Sea-Going Force Exploitation Enterprise (IEFT) Navrom in Constanta, Romania's largest port.

MARIAN COSTIN ■

MOTORS FOR POWER STATIONS

"MINICOMP" IN SCHOOLS

UNWOVEN FABRICS

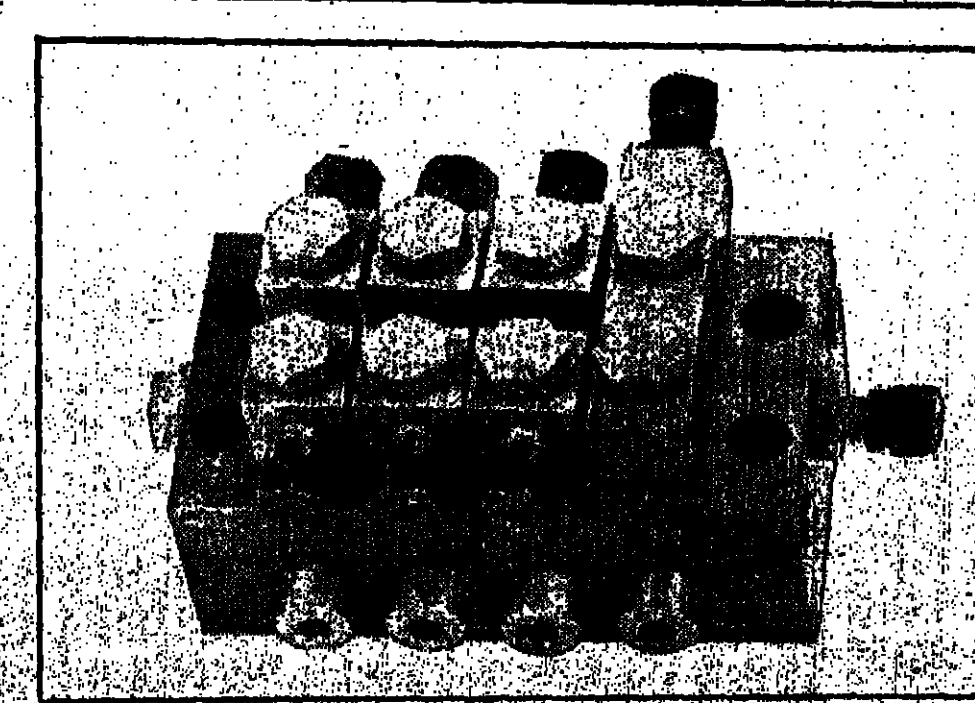
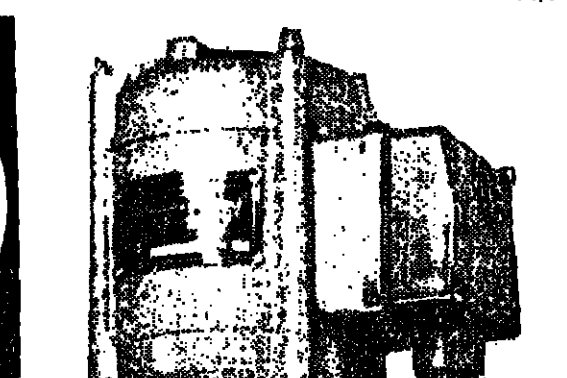
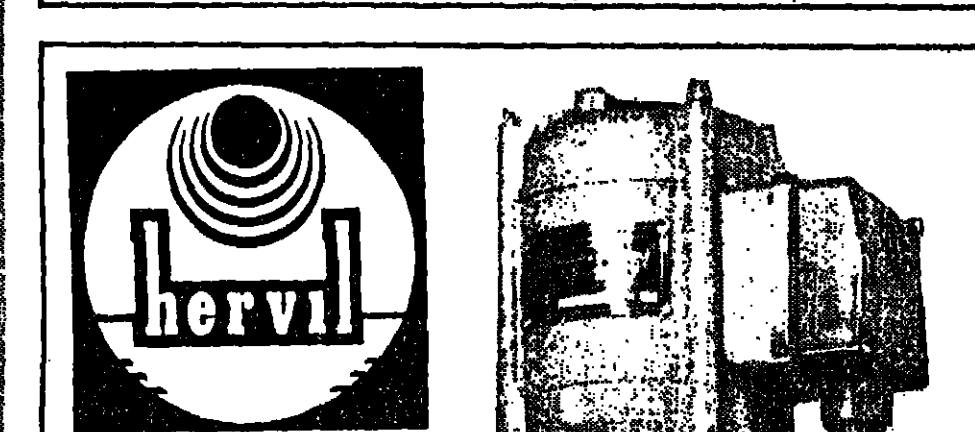
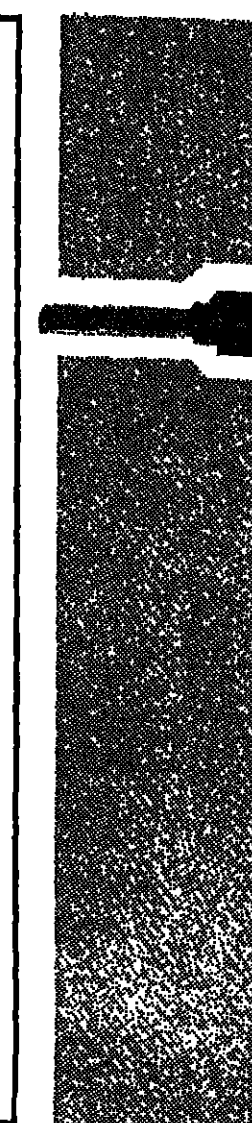
of unwoven fabrics. While in the beginning they were almost exclusively used for the ready-made clothes industry, today a number of such products are demanded in other branches too: machine building (especially in the auto and truck industries), agriculture (and improvement in particular) etc.

One of the most important units of this kind in Romania is Netex, which was set up in the early 1960s in the town of Blajina (see photo). Some 60 per cent of its various products go to the

13

THE HYDRAULIC EQUIPMENT ENTERPRISE

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EXPERTS AFFIRM THAT THE I.M.B. PHARMACEUTICAL PRODUCTS ARE RECOMMENDED FOR THE MOST DIVERSE THERAPIES BECAUSE OF THEIR INCONTESTABLE EFFICIENCY

The great achievements of our firm, the Bucharest Drug Enterprise (IMB), are due to a remarkable technico-scientific and productive potential consisting of scientific research sectors (which closely collaborate with specialized institutes in Romania), ultramodern laboratories and installations boasting great productivity and a high technological standard such as those for extraction and purification, electronically controlled technological flows and advanced, highly competitive methods. A steady activity in the field of drug production engineering and technology is carried on at IMB, which guarantees the superior qualities and therapeutic properties of the IMB drugs. As a result, the 620 pharmaceutical products made by our enterprise have thoroughly imposed themselves in the markets of over 50 countries among which England, Austria, Czechoslovakia, People's China, Denmark, Switzerland, Finland, West Germany, Italy, Japan, Poland, the USA, the USSR etc.

those who handle various installations.

PIRIVIN. The product is presented in phials containing 20 compressed tablets containing 100 mg piritalol (mellorates the use of glucose by the nervous cell), 10 mg vincamina (adapts regional blood flow and uses circulating oxygen in cerebral metabolic needs) and 25 mg pyridoxine hydrochloride (improved oxidative reduction processes, being implicated in the metabo-

MEIRONIDAZOL 0.5 percent solution. It has two types A and B, both being presented in phials of 200 ml perfusion solution administered intravenously to adults and children (12 years old and over) through perfusion of 100 ml solution for 30-60 minutes at 6-8 hours interval. Type A contains 0.500 g metronidazole, 5.47250 g pharmaceutical glucose 0.02587 g sodic chloride, 0.2487 g hydrochloric acid 0.1 N and distilled water. Type B contains 0.500 metronidazole, 0.780 g sodic chloride and distilled water. Metronidazole is an excellent antibacterial drug recommended in serious infections owed to anaerobes, being very active against these bacteria with or without associating other germs. With an excellent tissue penetration, being absorbed at liver le-

vel, and the major resulting metabolite having an antibacterial and antiparasitary action, Metronidazole is indicated in the prevention of septicaemia, cerebral abscess, osteomyelitis, necrotizing pneumonia, peritonitis or especially in the pre-surgical prophylaxis of patients with high infection risk with anaerobic germs. A cure lasts 7-10 days and only in special cases up to 14 days, the perfusion being replaced when possible, with the product's oral or rectal administration. In case of pre-surgical prophylaxis perfusions are made of 15 mg/kg body weight 30' to one hour before surgery and 7.5 mg/kg body weight for 30 to 60 minutes, 6-8 hours after surgery. Precautions are recommended in the posology of patients with renal or hepatic deficiencies.

OTHER IMB PRODUCTS WHICH ARE WIDELY SOLICITED ON THE WORLD MARKET

GEROVITAL, ASLAVITAL (tablets, injectable ampoules), **APILARNIL, APILARNIL-prop** (tablets) - tonic and trophic • **PELL-AMAR** (injectable ampoules, ointment, gel, cream) - antirheumatic • **SINERDOL EH** (sugar-coated tablets) - antibiotic • **RODILEMID** (injectable ampoules) - antihelptic anti-inflammatory • **ULCOSILVANIL** (compressed tablets) - antacid, antulcers.

IMB's range of drugs of organic synthesis and of conventional products - from tablets and gelatinous coated tablets to plasma substitutes and veterinary products - is too wide for us to be able to present them at large. However we shall mention:

ANTIMICROBIAL AND ANTIPARASITIC MEDICATION: antimicrobial antibiotic and chemotherapeutic products, tuberculostatic, antimycotic, antiamoebic, antitrichomoniasis, antihelminthic, antiseptic, disinfectant products; • **MEDICATION OF NEOPLASTIC DISEASES** (cytostatic and hormonocytostatic) • **MEDICATION OF THE CARDIO-VASCULAR SYSTEM:** cardiotonic, antiarrhythmic products • **METABOLIC:** water-so-

luble vitamins; anabolizers tonic, trophic solutions for infusion • **MEDICATION FOR THE CENTRAL NERVOUS SYSTEM:** hypnotic drugs, sedatives, neuroleptic drugs, tranquilizers, antidepressants, analgesics, antipyretics, central excitants • **MEDICATION OF THE AUTONOMIC SYSTEM:** sympathomimetic drugs, parasympathomimetic drugs; parasympatholytic and spasmolytic drugs • **ANTI-RHEUMATIC AND ANTI-MALARIA DRUGS:** produced through synthesis • **ANTI-ALLERGIC AND ANTI-HISTAMINIC DRUGS.**

IMB's great scientific and technico-productive potential helps it to cooperate with specialist firms guaranteeing the fulfillment of its obligation in irreproachable conditions, in the context of obtaining mutually advantageous results. An eloquent plea for this assertion is IMB's cooperation with many famous firms, such as CIBA-GEIGY (Switzerland); Ludomil • SANDOZ (Switzerland); Terecan, Tavegil • BAYER (West Germany); Trasylol • ROGER BELLON (France); Colimycin • PHIZER Inc. New York (USA); Falsign.

REMEMBER:
THE IMB PRODUCTS MEET THE WORLD'S LATEST DEMANDS IN THE FIELD OF THERAPY AND PROPHYLAXIS OF VARIOUS DISEASES.

NEW PRODUCTS OF THE BUCHAREST DRUG ENTERPRISE WHICH HAVE EARNED A PLACE IN INTERNATIONAL MEDICAL PRACTICE

LUDIOMIL. It comes in bottles containing 20 compressed tablets of 75 mg or 25 mg Ludomil hydrochloride each, respectively. The preparation is an antidepressive which efficiently combats anxiety, irritability, agitation, psychomotor inhibition, psychosomatic and somatic disorders, as well as the disorders accompanying psychic depressive states in children and adolescents (periodical, cyclic, tardive, organic exhaustion, symptomatic etc.), apathy (especially with older people).

LUDIOMIL is orally administrated daily in single or fractioned takings to patients in serious states or hospitalized: 150 mg (in the evening) the respective dose determining in the second week of treatment an equilibrium of blood concentrations of 100-400 mg/ml - or 30 gm three times daily. EKG control is recommended for patients with cardiopathies or elderly patients; patients with hepatic, renal affections, glaucoma and prostate affections should be prudent; attention should be paid to administering the products to drivers and

lism of proteins, lipides and glucides). Pirivin is a neurotonic indicated to sportsmen, increasing their resistance during physical and psychic strain in training and competitions, for students during exams, the medicine having stimulating effects on attention and power of concentration and in general in cases of memory disorders and emotional instability. Other pharmacotherapeutic applications: states of asthenia, convalescence after diseases especially with children (flu, measles, hooping cough, etc.) in neuro-psychic deficiencies with children, in cases of cerebral atherosclerosis, in some hearing troubles.

WAYS OF CONTACTING US FOR FURTHER INFORMATION AND FIRM ORDERS

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